, UTAH OIL AND GAS CONSERVATION COMMISSION WATER SANDS REMARKS WELL LOG ELECTRIC LOGS FILE LOCATION INSPECTED

DATE FILED 5-24-85 PUBLIC LEASE NO. LAND: FEE & PATENTED STATE LEASE NO. U-0149776 DRILLING APPROVED: 6-3-85 - GAS (EXCEPTION LOCATION) SPUDDED IN:

PUT TO PRODUCING: INITIAL PRODUCTION: GRAVITY A.P.I.

GOR: PRODUCING ZONES TOTAL DEPTH:

1072' FSL, FT. FROM (N) (S) LINE. 1471' FEL.

OPERATOR

WELL ELEVATION 10-6-86 DATE ABANDONED: ipplication Rescirded FIELD:

NICOR EXPLORATION CO.

UNIT: COUNTY:

GRAND

RGE.

21E

FEDERAL 28-34

SEC.

28

FT. FROM (E) (W) LINE.

TWP

INDIAN

1/4 - 1/4 SEC.

28

SUB. REPORT/abd

SW SE

SEC.

RGE.

APT #43-019-31188

OPERATOR

WELL NO.

LOCATION

TWP.

19S

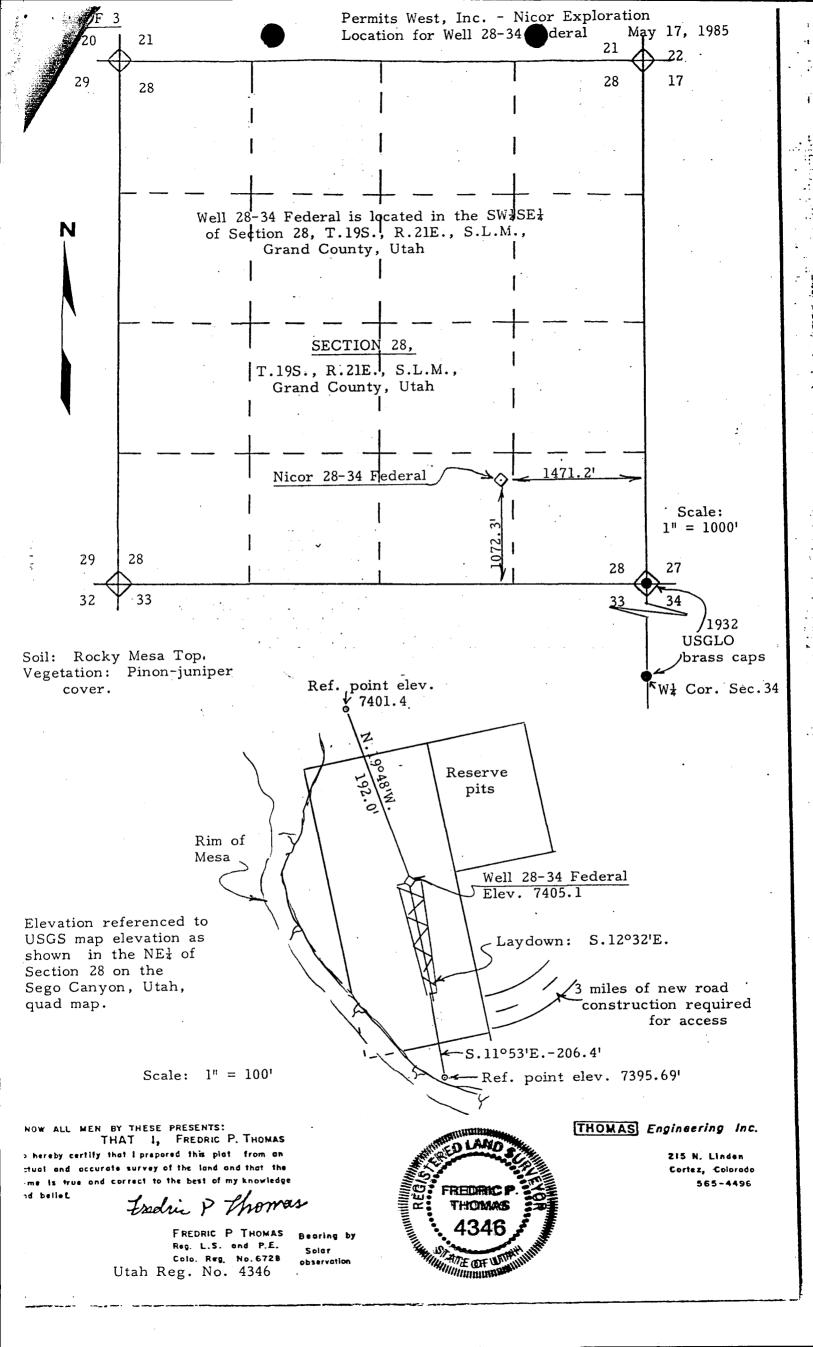
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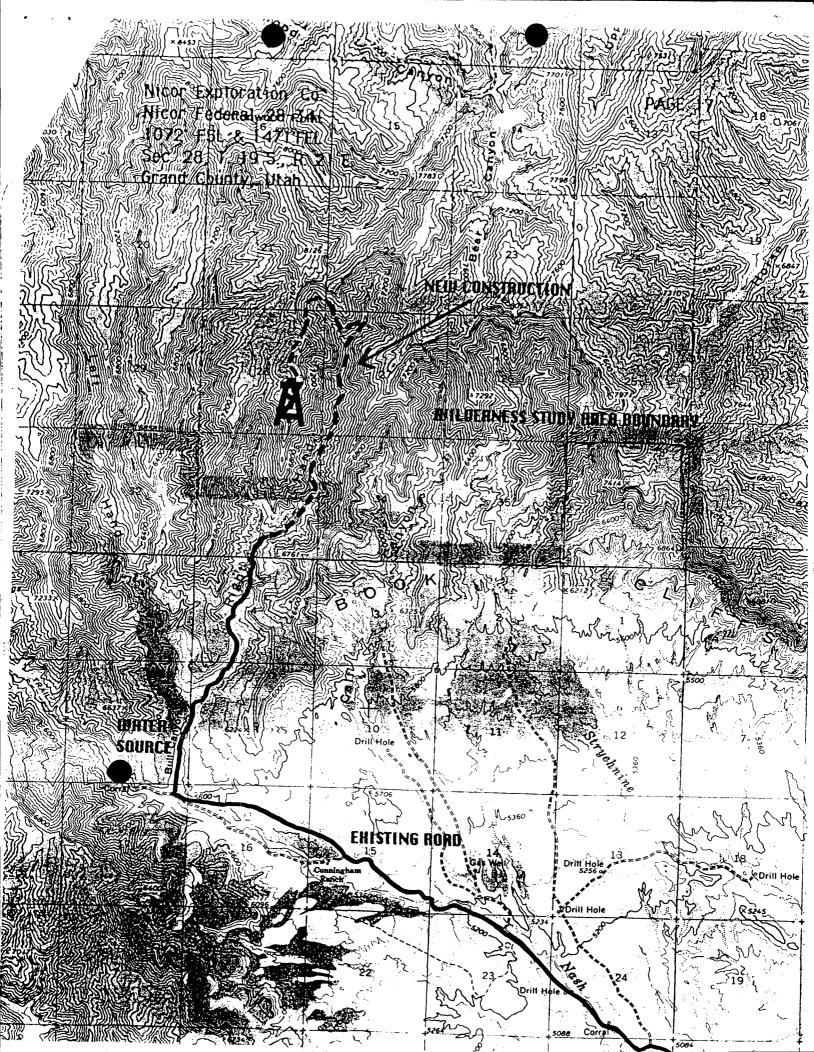
STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING

(Other instructions on reverse side)

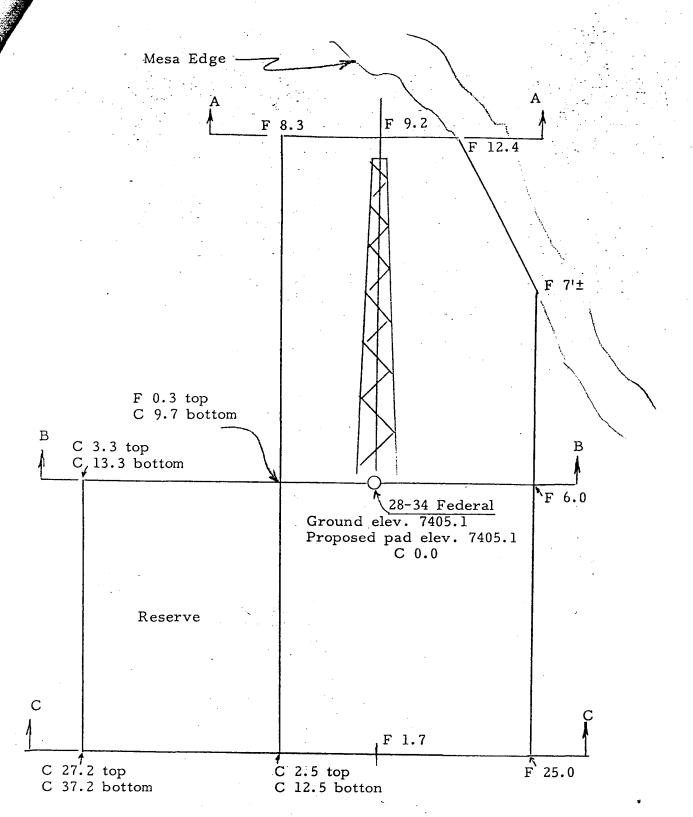
5. Lease Designation and Serial No. U-0149776

APPLICATI	ON FOR PERM	IT TO DRILL, DEI	EPEN, OR PLUG	BACK	6. If Indian, Allot	tee or Tribe Name
la. Type of Work	DRILL [4	DEEPEN []	PLUG B	ACK 🗌	7. Unit Agreement	** * *
b. Type of Well	Cor. E		Similar D. W		8. Farm or Lease	
Well 2. Name of Operator	Gas Well Othe	r	Single M Zone Zo	altiple ne		icor
	Nicor Explora	ation Co.	(303)-232-	9292	9. Well No.	1 00 74
3. Address of Operat	1		55.454			1 28-34
		lvd., Golden, Co			10. Field and Pool,	or Wildeat
4. Location of Well At surface	(Report location clearly a	nd in accordance with any S		UN	DES 16 NATED	
		1072 F3	L & 1471' FEL		and Survey or	
At proposed prod.	zone	Same	SW/SE		28-195-2	
14. Distance in mile	s and direction from near				12. County or Pari	
		NE of Thompson			Grand	Utah
15. Distance from plocation to near	est		5. No. of acres in lease	17. No. o to this	f acres assigned s well	
	drlg. line, if any)	1072'	640		640	
	drilling, completed,	N/A	. Proposed depth 5800'	129. Rotar	y or cable tools	Dotany
or applied for, or			3000	μr	22. Approx. date	Rotary
21. Elevations (Show	whether DF, RT, GR, etc.	['] 7405' grd.	Grant Contract of the Contract			Approval
23.		PROPOSED CASING	AND CEMENTING PROGR.	AM.	<u> </u>	
Size of Hole	Size of Casing	Weight per Foot	Setting Depth		Quantity of Ce	ement
12/4"	85/8"	17#	0-600			
•		APD not be appr panying right-c		•		ate that
The car car a car	2. Drilling p	rogr <u>am</u> is on fo APPROVED	llowing pages. BY THE STATE	A	RECE	VED
CUEIVE	K.	OF UTAH	DIVISION OF		AAAV O .	1005
		OHL, GAS,	AND MINING		MAY 24	1303
MAY 2 4 1985		DATE 6/3	<i>[85</i>]			
man a too		BY THE	Dure	_	DIVISION	OF OIL
Production of the second		BY: / Jhn K	10 (2)		gas a n	MING
AMISHON OF C	•	WELL SPACI				
IN ABOVE SPACE ductive zone. If pro	DESCRIBE PROPOSED I	ROGRAM: If proposal is to lirectionally, give pertinent	o deepen or plug back, give data on subsurface location	data on prese s and measur	ent productive zone red and true vertical	and proposed new pro depths. Give blowou
preventer program, 1 24.	ny.					
Signed Signed	rian Vo	Title	Consultant/Agent f	or Nicor		-23-85
	Federal or State office use)					
Permit No			Approval Date			
Approved by Conditions of app	proval, if any:	Title			Date	





Permits West, Inc. - Por Exploration Location for Well 28-34 Federal May 17, 1985



Scale: $l^{11} = 50^{1}$

THOMAS Engineering Inc.

215 N. Linden Cortez, Colorado 565-4496

All lease operations will be conducted in full compliance with applicable laws, regulations (43 CFR 3100), Onshore Oil & Gas Order *1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. The operator will furnish a copy of these conditions to his field representative to ensure compliance.

8 Point Drilling Program

Directional drilling was considered as an option for this well. After evaluation, directional drilling was discarded because it would more than double the drilling costs. Completion and production costs would also be increased. Given the small area (≈ 0.4 acre) of the drilling target, no alternate sites were feasible.

1. The estimated tops of important geologic markers are:

Formation Name Wasatch Mancos "B" Dakota Siltstone Dakota Cedar Mountain Morrison Entrada	Depth 0000° 4340° 5007° 5158° 5213° 5650°	Above Sea Level +7405' +3065' +2515' +2398' +2247' +2192' +1755'
---	---	---



2. The estimated depths at which water, oil, gas, or other mineral bearing zones are expected to be encountered are:

Formation Name	Type of Zone	Top & Bottom Depths
Mancos "B"	Oil/Gas	4340'-4360'
Dakota	Oil/Gas	5007'-5100'
Cedar Mountain	Oil	5158'-5213'
Morrison	Oil	5213'-5650'
Entrada	Oil/Water	5650'-5800' (TD)

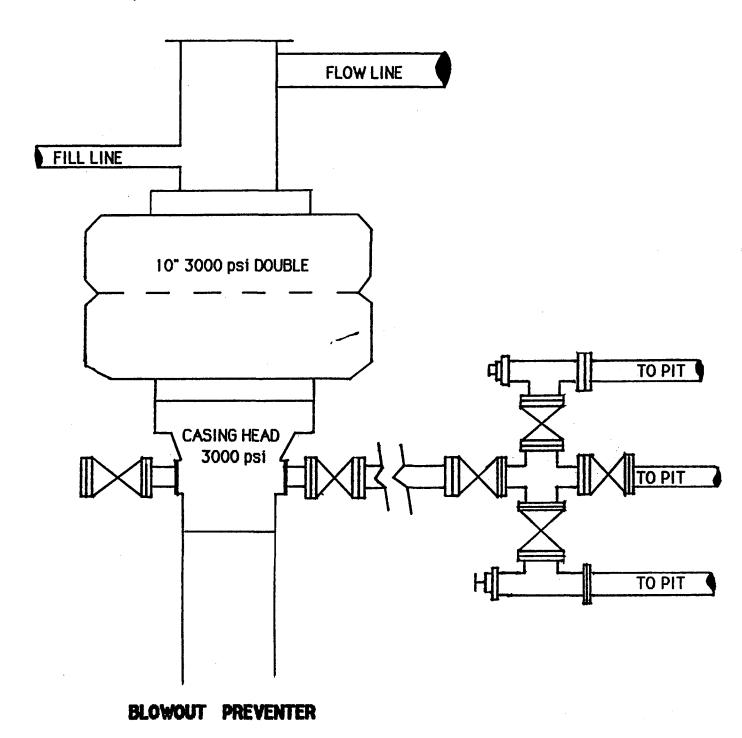
Surface and production casing will be set. Well will be drilled with air mist. All fresh water encountered during drilling will be recorded by depth, cased, and cemented. All oil and gas shows will be tested to determine commercial potential.

3. BOP systems will be consistent with API RP 53. A schematic diagram of the 10" 3000 psi BOP is on Page 3.

Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. BOP controls will be installed before drilling the surface casing plug, and will stay in use until the well is completed or abandoned. Preventers will be pressure tested before drilling casing cement plugs.

BOPs will be inspected, operated at least daily to ensure good mechanical working order, and the inspection recorded on the daily drilling report.







PAGE 4

Nicor Exploration Co. Nicor Federal 28-34 1072' FSL & 1471' FEL Sec. 28, T. 19 S., R. 21 E. Grand County, Utah

4. The proposed casing program is:

Hole Size	O.D.	Weight	Grade	Type	Age	Setting Depth
12-1/4"	8-5/8"	17#	K-55	ST&C	New	0'- 600'
7-7/8"	5-1/2"	15.5#	K-55	ST&C	New	0'-5800'

The proposed cementing program is:

Type of Casing	Cement & Additives	<u> Iop</u>
Surface	430 sx Class G + 2%CaCl + 1/4 lb/sx Floseal	Surface
Production	Lead: 200 sx light + 1/4 lb/sx Floseal	×
Production	Tail: 100 sx Class G + 1/4 lb/sx Floseal	*
	*Fill TD to 4800' (2000' of fill)	

- 5. The entire well will be drilled with an air mist. The blooie line will be misted to control dust. If mud is used, a mud logging unit will be installed. Pallets of gel, LCM, and lime will be on hand to control unexpected water flow.
- 6. No cores will be taken. The following logs will be run:
 Ground Level to Total Depth: GR
 Surface Casing to Total Depth: DIL GR CAL
 4000' to Total Depth: FDC CNL GR SP

If mud is used, then a drill stem test will be run in the Cedar Mountain, Morrison, and Entrada.

Whether the well is completed as a dry hole or producer, "Well Completion or Recompletion Report and Log" (Form 3160-4) will be submitted not later



than 30 days after completion of the well, or after completion of operations being performed, *per* 43 CFR 3164. Two copies of all logs, core descriptions & analyses, well test data, geologic summaries, sample descriptions, and all other data obtained during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. (If requested, sample cuttings, fluids, and/or gases will be submitted to the District Manager.)

- 7. The expected bottom hole pressure is 2697 psi.

 No abnormal pressures, temperatures, or hydrogen sulfide are expected.
- 8. The anticipated spud date is August 15, 1985. It is expected it will take 8 days to drill the well and 7 days to complete the well.

Nicor will begin dirt work upon approval.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before operations resume.

The spud date will be phoned to the Area Manager, a minimum of 24 hours before spudding. A Sundry Notice (Form 3160-5), reporting the spud date and time, will be sent to the District Manager within 24 hours after spudding. If the spud is on a weekend or holiday, the Sundry will be sent on the following regular work day.



Starting with the month in which operations begin, and continuing each month until the well is physically plugged and abandoned, a "Monthly Report of Operations" (Form 3160-6) will be sent to the District Manager.

<u>Immediate Report</u>: Spills, blowouts, fires, leaks, accidents, or any other unusual events will be promptly reported to the Resource Area *per* NTL-3A.

If a replacement rig is planned for completion, a Sundry Notice to that effect will be filed for prior approval of the District Manager. All conditions of this approved plan apply to all operations of the replacement rig. In emergencies, verbal approval can be given by the District Manager.

If the well is successfully completed for production, then the District Manager will be notified. Written notification will be sent not later than 5 business days following the date on which the well is placed on production. The Area Manager will schedule a first production conference within 15 days after receipt of the first production notice.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Manager. This preliminary approval will not exceed 30 days or 50 MMcf of gas. Approval to vent/flare beyond this initial period will require the District Manager's approval per NTL-4A.

No well abandonment operations will begin without the prior approval of the District Manager. Oral approval will be obtained from the District Manager for newly drilled dry holes, failures, or emergencies. A Sundry Notice will be sent to the District Manager within 30 days following completion of the well for abandonment. The Sundry will note where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the reclamation required by the approved APD or abandonment notice has been completed to the satisfaction of BLM.



PAGE 7

Once plugged, a capped regulation dry hole marker will be erected. The following information will be beaded on with a welding torch: Nicor Exploration Co., Nicor Federal 28-34, SWSE 28-19-21, U-0149776.



13 Point Surface Use Plan

1. EXISTING ROADS (Pages 16 & 17)

From the West Cisco Exit on 1-70 go 1.5 miles SE on U-128.
Then go 14.5 miles NW on the Nash Wash Road to the Cunningham Ranch.
Then go 2.0 miles N and NW to Bull Canyon.
Then go 0.8 miles N to Right Hand Fork.
Then go 2.3 miles NE to a fork in the road.
New construction will begin at the fork in the road.

The first 18.0 miles are county roads and will not need upgrading. The roads will be maintained to a standard equal to their present condition. An Encroachment Permit has been approved by the Grand County Road Dept.

The final 3.1 miles of existing road will require a BLM right-of-way. This road will not need upgrading, but will be maintained by a grader to remove rocks which have rolled onto the road.

2. PLANNED ACCESS ROADS (Page 17)

The first 3.0 miles of new construction will be off-lease road authorized by a right-of-way. The final half mile of new construction will be on-lease road authorized by the APD. All of the road has been flagged. All of the drainage crossings will be low water crossings. None of the roads will be surfaced, nor will any culverts be installed.

From the point at which new construction will begin, a road 3.5 miles in length will lead to the well. A 20' wide flatbladed road (maximum disturbed width of 30') will follow the canyon bottom for the first 2.0 miles. Average grade is 6% and maximum is 8%. Turnouts will be placed 1,000' apart in the



last half mile.

(While a canyon bottom road is not ideal, it is a "practicable alternative" as referenced in Section 2(a)(2) of Executive Order 11988. Building two miles of bench cut road would unnecessarily and unduly increase the total environmental impact, further impair the wilderness suitability of the canyon, and add considerable difficulty to reclamation.)

The next 1.0 miles of 20' wide road (maximum disturbed width of 60') will require a full bench cut. Average grade is 10%, maximum grade will be 15%. Turnouts will be located every 1,000'. Road surface will be insloped 2-4% and drainage dips placed every 160'.

The final half mile of 20' wide road (maximum disturbed width of 30') will be flatbladed to minimize wilderness impairing impacts. Average grade will be 6%, maximum will be 8%. No turnouts will be used.

The road will be reclaimed or upgraded to Class III Standards within 60 days of dismantling the drill rig. If this deadline cannot be met, Nicor will notify the Area Manager so temporary drainage control can be installed.

Surface disturbance and vehicle travel will be limited to the approved location and road. Any extra area needed will be approved in advance by the Area Manager.

3. EXISTING WELLS

There are no water, injection, producing, or drilling wells within a 1 mile radius of the location. There is one shut-in gas well 5,071' SSW operated by J.C. Thompson at 1338 FSL and 2233 FEL Sec. 33, T.19 S., R. 21 E.



4. PROPOSED PRODUCTION FACILITIES

The type and layout of the production facilities are not known now. A Sundry Notice will be submitted for approval before they are installed.

All permanent (onsite for at least 6 months) structures, including pump jacks, will be painted a flat, nonreflective Juniper Green color within 6 months of installation. OSHA parts may be excluded.

If a tank battery is built, it will be surrounded by a dike of sufficient capacity to contain 150% of the storage capacity of the battery. All loading lines will be placed inside the dike.

All site security guidelines in 43 CFR 3162.7 will be obeyed. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, must have the prior written approval of the District Manager.

Gas meter runs for each well will be within 500' of the wellhead. The gasflowline will be buried from the wellhead to the meter, along with any other sections on the pad. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well pad. Meters will be calibrated in place before any deliveries. Tests for meter accuracy will be conducted monthly for the first 3 months on new meters, and at least quarterly thereafter. The Area Manager will be provided with a date and time for the first meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be sent to the Area Manager. All meters will conform with the API standards for liquid hydrocarbons and AGA standards for natural gas measurement.



5. WATER SUPPLY (Page 17)

Any water needed will be pumped directly from Nash Wash (SESW 8-20-21) into a truck and hauled to the well. No construction will be done. This is casual use as defined in 43 CFR 2800.0-5(m) and BLM Manual 2801 A.2.b.,c., & d. A temporary permit to appropriate water has been filed with the State. Nicor will not use any water without Bill Cunningham's permission.

6. CONSTRUCTION MATERIALS

All construction materials are native *in situ* soils on lease. The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

7. WASTE DISPOSAL

The reserve pit will not be lined unless fractured rock is encountered. At BLM's request during the on-site, the reserve pit (Page 18) will be reduced in size and shifted south to avoid a large cut on the north. It will be fenced on 3 sides with 3 strands of barbed wire. The 4th side will be fenced once the rig moves off. The fence will be kept in good repair while the pit is drying.

All trash will be placed in a portable trash cage. When full, it will be hauled to an approved landfill.

Human waste will be disposed of in 20' deep ratholes or chemical toilets. The ratholes will be immediately filled when the trailers are removed.

Produced water will be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period an NTL-2B



application will be submitted for the District Manager's approval of a permanent disposal method and site.

8. ANCILLARY FACILITIES

There will be no ancillary facilities.

9. WELL SITE LAYOUT

See Page 18 and afterwards for depictions of the well pad, cross sections, cut and fill diagrams, reserve pit, access road onto the pad, parking, living facilities, soil stockpile, and rig orientation.

The trees and top 8" of topsoil will be removed from the location and stockpiled separately on the east side of the location.

10. RECLAMATION

Immediately upon completing drilling, the pad and surrounding area will be cleared of all remaining debris, materials, trash, and junk not required for production.

Nicor will contact the Area Manager 48 hours before starting reclamation dirt work, and upon completion of reclamation. (In the event of production, the pit and that part of the pad not needed for production will be reclaimed as follows.)

All disturbed areas will be recontoured to the approximate natural contours. Stockpiled topsoil will be evenly distributed over disturbed areas. Prior to seeding, all disturbed areas, including roads, will be scarified and left with



PAGE 13

Nicor Exploration Co. Nicor Federal 28-34 1072' FSL & 1471' FEL Sec. 28, T. 19 S., R. 21 E. Grand County, Utah

a rough surface.

Seed will be broadcast at a time specified by BLM. A harrow or similar implement will be dragged over the seeded area to assure seed cover. The following seed will be sown:

Species	lbs/ac
Bluebunch wheatgrass	2
Indian ricegrass	2
Crested wheatgrass	2
Yellow sweetclover	1
Alfalfa	1
Antelope bitterbrush	2
Fourwing saltbush	2
Mexican cliffrose	2

11. OWNERSHIP

The surface and mineral owner is the U.S. Government.

12. OTHER INFORMATION

There will be no change from the proposed drilling and/or workover plan without prior approval from the District Manager. A Sundry Notice will be filed for approval for all changes of plans and other operations *per* CFR 43 3164.

Safe drilling and operating practices must be used. All wells, whether drilling, producing, suspended, or abandoned will be identified *per* 43 CFR 3162.2.



PAGE 14

Nicor Exploration Co. Nicor Federal 28-34 1072' FSL & 1471' FEL Sec. 28, T. 19 S., R. 21 E. Grand County, Utah

If subsurface cultural materials are exposed during construction, work in that spot will stop immediately and the Area Manager will be called.

This permit will be valid for one year from the date of approval. After the permit expires, a new application will be filed for approval of any future operations.

The District Manager's mailing address is P.O. Box 970, Moab, Utah 84532. His phone number is 801-259-6111.

The Area Manager's mailing address is P.O. Box M, Moab, Utah 84532. His phone number is 801-259-8193.

From the well, the nearest hospitals are 75 miles east in Fruita, Colorado or 80 miles south in Moab, Utah. Nearest gas stations, public phone, food, etc. are 41 miles southwest in Thompson, Utah.



13. REPRESENTATION AND CERTIFICATION

For questions concerning the APD, please contact:

Brian Wood Permits West, Inc. P.O. Box 1105 Monticello, Utah 84535 801-587-2087

Nicor Exploration's field representative is:
John Freshwater, Manager - Operations
Nicor Exploration Co.
1667 Cole Blvd.
Golden, Co. 80401
303-232-9292

CERTIFICATION

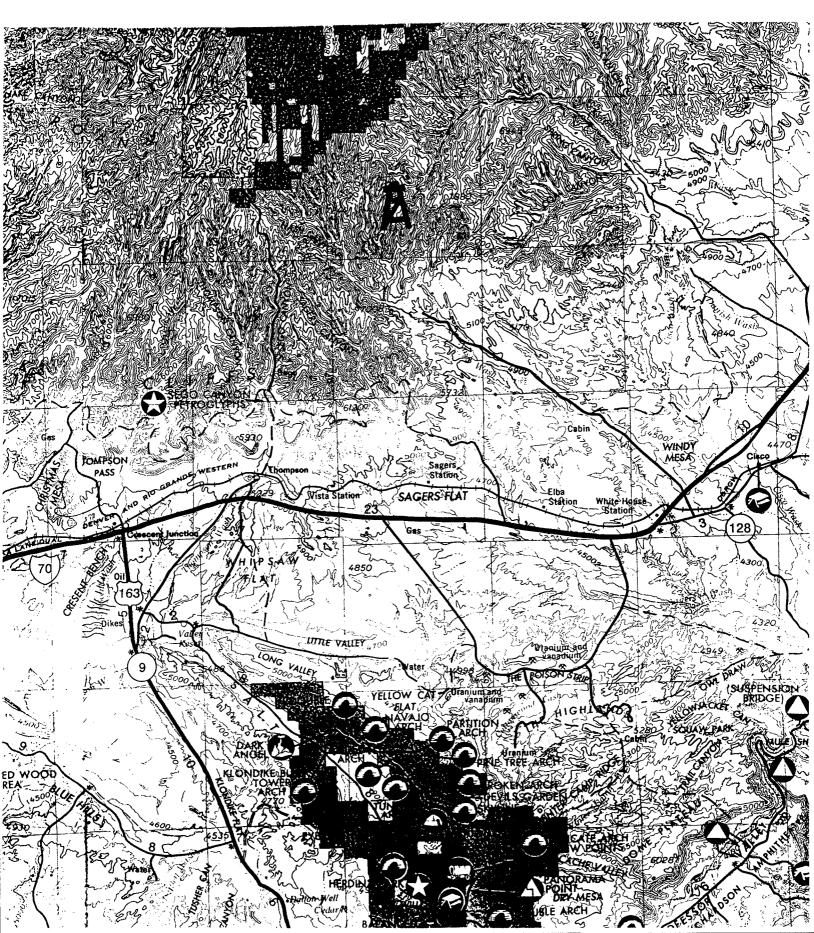
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Nicor Exploration Co. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

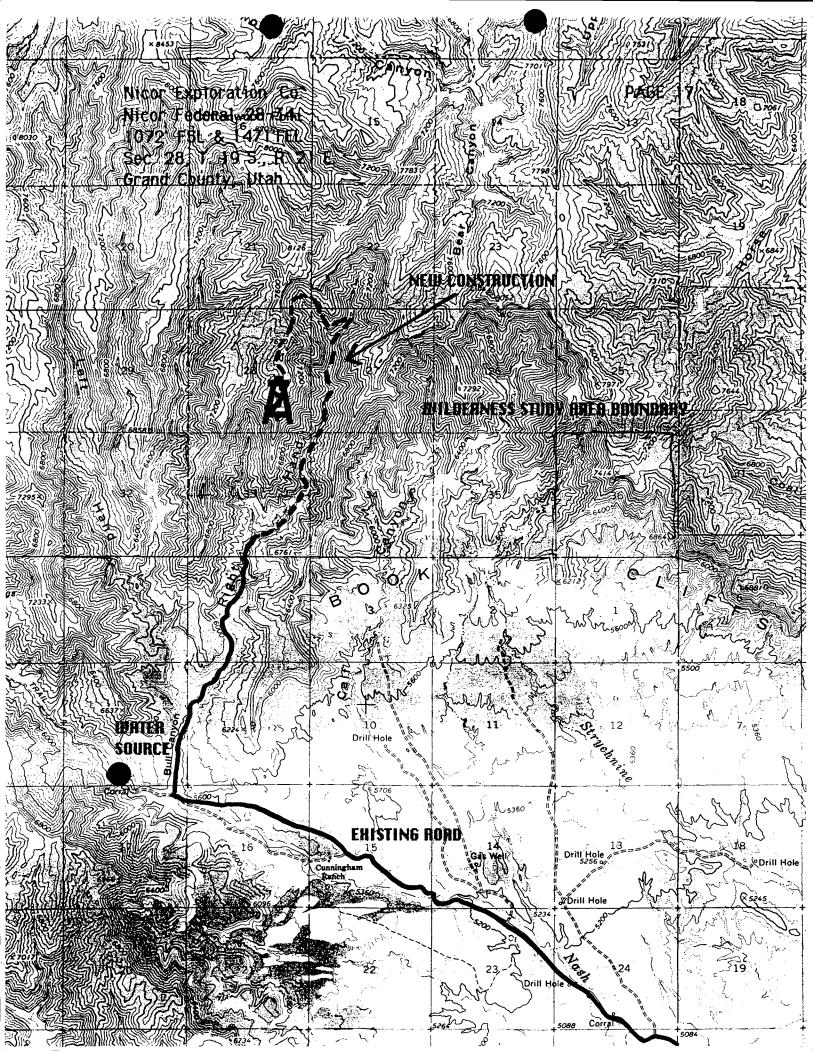
Date May 23, 1985

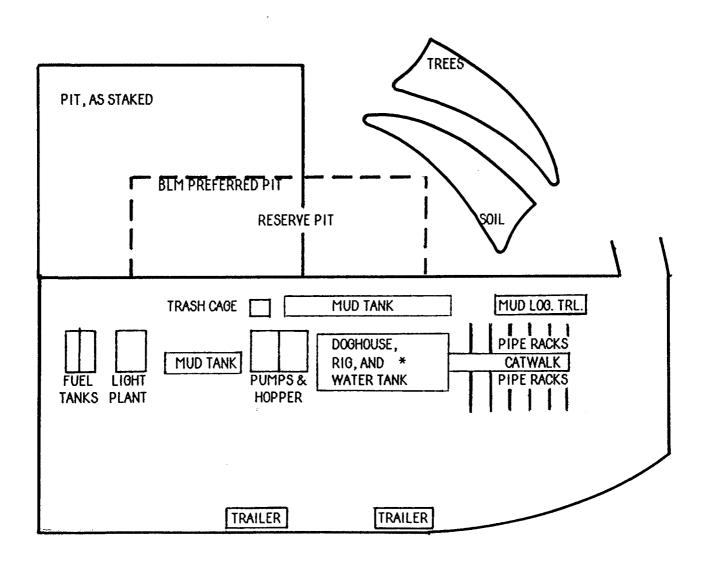
Brian Wood - Consultant for Nicor Exploration Co.PRR.

PERMITS WEST

PROVIDING PERMITS for the ENERGY INDUSTRY

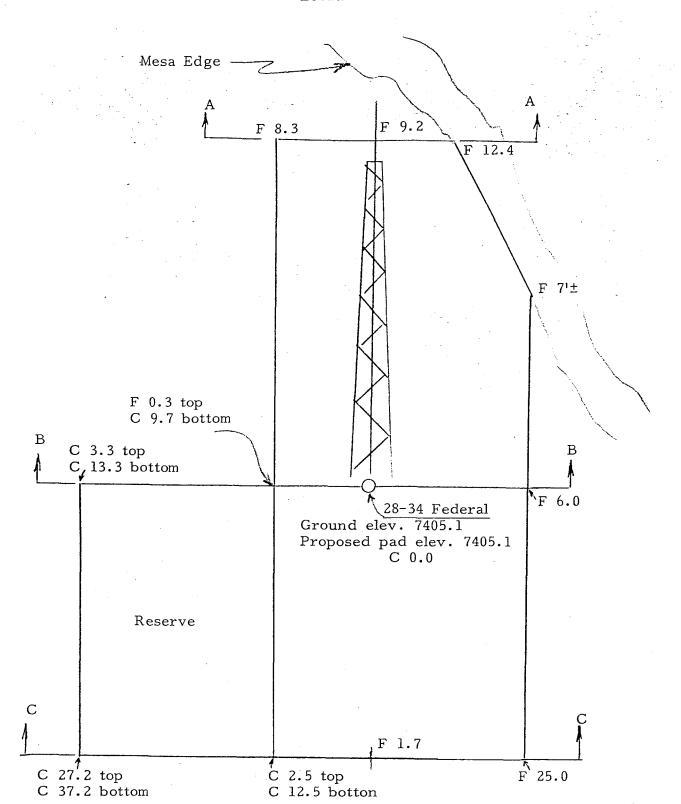








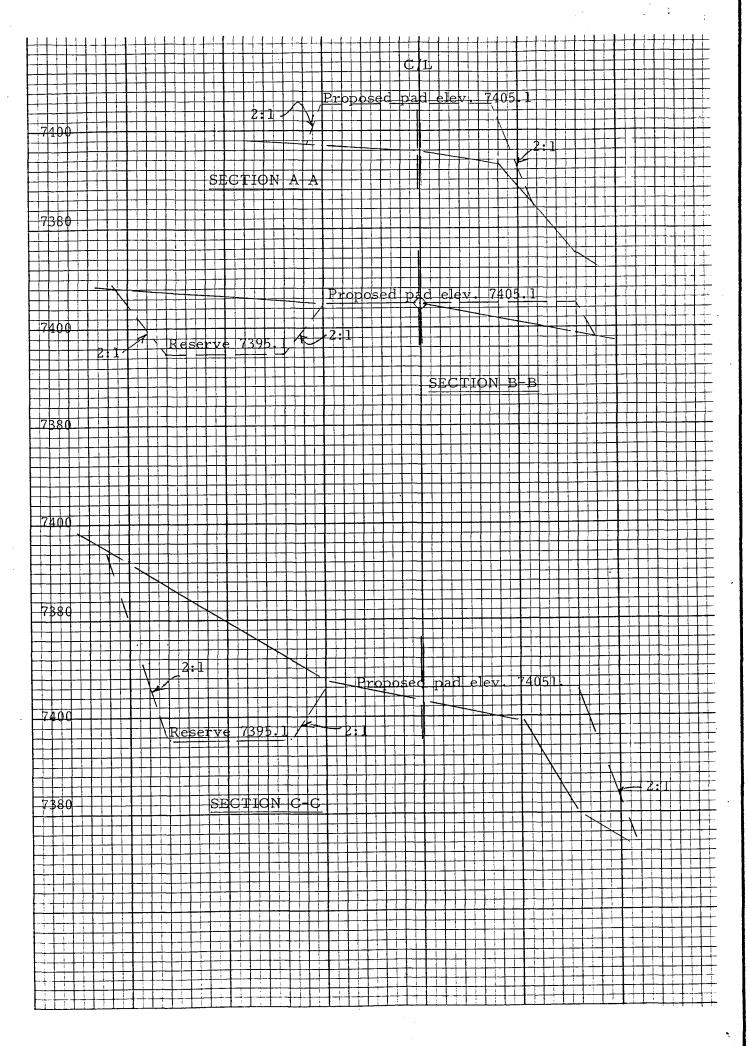




Scale: $l^{11} = 50^{1}$

THOMAS Engineering Inc.

215 N. Linden Cortez, Colorado 565-4496 Permits West, Inc. - icor Exploration Location for Well 28-54 Federal May 17, 1985



Horizontal scale: 1" = 50' Vertical scale: 1" = 20'

THOMAS Engineering Inc.

215 N. Linden
Cortez, Colorado
565-4496

Form 3160-8 (November 1983) (Formerly 9-1123) (Submit in triplicate to appropriate BLM District Office)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

STATE OFFICE:

BUREAU OF LAND MANAGEMENT - Moab, Utah

SERIAL NO.:

U-0149776

and hereby designates

NAME:

NICOR Exploration Company

ADDRESS:

1667 Cole Blvd.

Golden, Colorado 80401

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the authorized officer may serve written or oral instructions in securing compliance with the Operating Regulations (43 CFR 3160) with respect to (describe acreage to which this designation is applicable):

Township 19 South, Range 21 East

Section 28: All

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the authorized officer of any change in the designated operator.

HARPER OIL COMPANY

By: Charle E. met

Charles E (Signature of lessee)
Attorney-in-fact

May 22, 1985

(Date)

P. O. Box 5928 T.A., Denver, CO 80217

(Address)

This form does not constitute an information collection as defined by 44 U.S.C. 3502 and thereto does not require OMB approval.



NICOR EXPLORATION

1667 Cole Boulevard Golden, Colorado 80401 Phone 303 232 9292

May 17, 1985

To Whom it May Concern:

NICOR Exploration authorizes Brian Wood of Permits West, Inc. to represent us as our agent for the NICOR 28-34 Federal Well. This includes conducting the on-site, preparing the APD, signing the APD and right-of-way, and any related matters.

Sincerely,

K. C. Wardwell

Exploration Manager

KCW/mw

OPERATOR Micor Explores	tion Co.	DATE 5-30-85
WELL NAME Televal 28-3		
SEC <u>SWSE</u> 28 T <u>195</u>	R 2/E COUNTY	Grand
43-019-31188 API NUMBER		2 CF LEASE
CHECK OFF:		
PLAT	BOND	NEAREST WELL
	FIELD	POTASH OR OIL SHALE
PROCESSING COMMENTS:	4960'	
Mother wells within Med wither by Ception location		
Exception location		
APPROVAL LETTER:		
SPACING: A-3 UNIT	c-3-a	CAUSE NO. & DATE
c-3-b	c-3-c	
STIPULATIONS:		
STIPULATIONS: 1- Water 2- Exception location		
	•	



355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

June 3, 1985

Nicor Exploration Company 1667 Cole Blvd. Golden, Colorado 80401

Gentlemen:

Re: Well No. Federal 28-34 - SW SE Sec. 28, T. 19S, R. 21E 1072' FSL, 1471' FEL - Grand County, Utah

Approval to drill the above referenced gas well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure, subject to the following stipulations:

- 1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water.
- 2. Submittal to the Division of information justifying the necessity for an exception location and verification of ownership within a radius of 500 feet of the proposed location.

In addition, the following actions are necessary to fully comply with this approval:

- 1. Spudding notification to the Division within 24 hours after drilling operations commence.
- 2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
- 3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695 or R. J. Firth, Associate Director, (Home) 571-6068.

Page 2 Nicor Exploration Company Well No. Federal 28-34 June 3, 1985

4. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-019-31188.

Sincerely,

Jøhn R. Baza

Petroleum Engineer

as

Enclosures

cc: Branch of Fluid Minerals



June 3, 1985

Arlene Sollis Utah Div. of Oil, Gas, & Mining 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 RECEIVED

JUN 0 5 1985

DIVISION OF OIL
GAS & MINING

Dear Arlene,

As requested, I am asking that NICOR Exploration Co. be granted an exception for the NICOR Federal 28–34 Well (Sec. 28, T. 19 S., R. 21 E.) *per* Rule C-3(c):

- 1) As stated on PAGE 1 of the APD, the geologic target is of a size and in a location so as to prevent an orthodox location.
- 2) As seen on PAGE 17 and the surveyor's plats of the APD, topography prevents an orthodox location. An orthodox location in the SWSE would be on slopes in excess of 45 degrees.
- 3) The ownership of all oil and gas leases within a radius of 660 feet of the proposed well is common with the ownership of the oil and gas lease under the proposed well.

NICOR Exploration will submit an approved permit to appropriate water before spudding the well.

Please feel free to call me if you have any other questions.

Sincerely yours

Brian Wood



United States Department of the Interior 3162 (U-065)

BUREAU OF LAND MANAGEMENT

Moab District P. O. Box 970 Moab, Utah 84532

SEP 30 1986



State of Utah Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203

Attention: Mr. John Baza

DIVISION OF OIL. GAS & MINING

Re: Requests of Status of Wells

Dear Mr. Baza:

We are replying to your requests for status on the following wells:

1) F-L Energy Corporation
Well No. Alker Federal 1-11
Sec. 11, T. 15 S., R. 12 E.
Well No. Alker Federal 1-15
Sec. 15, T. 15 S., R. 12 E.
Lease U-52626

Approval was given for the extension of application on Well No. 1-11 until 10/18/86, so Wells 1-11 and 1-15 could be drilled at the same time. No activity at this time.

2) Howell Oil Company
Well No. Gebauer-Risenhoover 24
Sec. 7, T. 42 S., R. 19 E.
Lease U-7303

We are in the process of rescinding this application.

3) Nicor Exploration Company Well No. Federal 28-34 Sec. 28, T. 19 S., R. 21 E. Lease U-0149776

Application was returned unapproved. Lease terminated two days after the receipt of the application.

4) TXO Production Company Well No. ARCO Federal "B" 2 Sec. 6, T. 16 S., R. 25 E. Lease U-9831

The pad was built, but the well was never drilled. TXO has intentions to drill this well at some point in the future (under a new APD) and has asked for approval to leave the well pad as is. This approval will be granted on a yearly basis. Approval was granted September 1, 1986.

If you have any questions, please contact the Branch of Fluid Minerals (801) 259-6111.

Sincerely yours,

ACTING District Manager

MOAB DISTRICT OFFICE

F-L ENERGY CORPORATION
Alker Federal Well No. 1-11
Sec.11, T.15S, R.12E,
Carbon County, Utah
API NO. 43-007-30094

Alker Federal Well No. 1-15 Sec.15, T.15S, R.12E, Carbon County, Utah API NO. 43-007-30113

HOWELL OIL COMPANY Gebauer Risenhoover Well No. 24 Sec.7, T.42S, R.19E San Juan County, Utah API No. 43-037-31155

NICOR EXPLORATION COMPANY Federal Well No. 28-34 Sec.28, T.19S, R.21E, Grand County, Utah API NO. 43-019-31188

TXO PRODUCTION COMPANY
ARCO Federal "B" Well No. 2
Sec.6, T.16S, R.25E
Grand County, Utah
API No. 43-019-31146



Norman H. Bangerter, Governor Dee C. Hansen, Executive Director Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

October 6, 1986

Nicor Exploration Company 1667 Cole Blvd. Golden, Colorado 80401

Gentlemen:

RE: Well No. Federal 28-34, Sec.28, T.19S, R.21E, Grand County, Utah, API NO. 43-019-31188

In concert with action taken by the U.S. Bureau of Land Management, approval to drill the above referenced well is hereby rescinded. A new Application for Permit to Drill must be filed with this office for approval, prior to future drilling of the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Since pely,

Jøhn R. Baza∖

⊭etroleum Engineer

sb

cc: BLM-Moab

D. R. Nielson

R. J. Firth

Well file

0327T-7

JUN 17 1985 WATER RIGHTS PRICE

To Whom it May Concern:

I hereby agree to sell water from Nash Wash to NICOR Exploration Co., or any of its contractors, for use with the NICOR Federal 28-34 Well (1072' FSL & 1471' FEL Sec. 28, T. 19 S., R. 21 E., Grand County, Utah). The amount of water sold will not exceed 2.0 acre-feet.

I also agree to this temporary change in the use of my water rights.

Bill Cunningham



453 South Carbon Avenue • P.O. Box 718 • Price, UT 84501 • 801-637-1303

June 24, 1985

Permits West, Inc. Attn: Brian Wood P.O. Box 1105 Monticello, Utah 84535

Re: Temporary Change 85-01-8

Dear Mr. Wood:

The above referenced Temporary Change Application has been approved. A copy is herewith enclosed for your records and information.

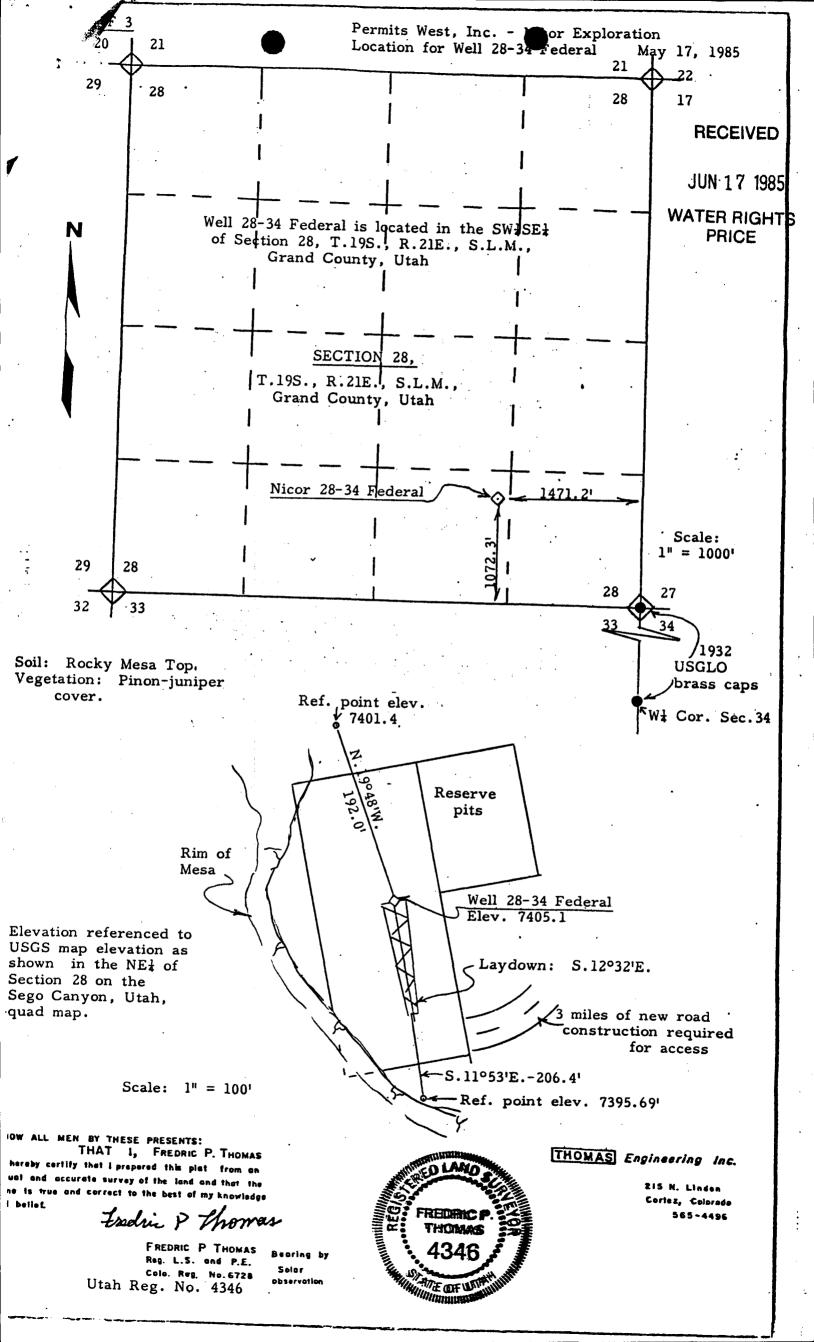
If you have any questions, please feel free to contact me.

Sincerely,

Mark P. Page Area Engineer for Robert L. Morgan, P.E. State Engineer

Enclosure

RLM/MPP/mjk



Form	m	8-61	-2M
------	---	------	-----

	· ·
APPLICATION NO	85-01-8
DISTRIBUTION SYSTEM	

Application For Temporary Change of Point of Diversion, RECEIVED

Place or Purpose of Use RECEIVED STATE OF UTAH JUN 24 1985 JUN 2 6 1985 WATER RIGHTS (To Be Filed in Duplicate) PRICE CIVISION OF UIL June 18. . . . 19. 85 GAS 8 MINING Monticello, Utah For the purpose of obtaining permission to temporarily change the point of diversion, place or purpose of use (Strike out written matter not needed) of water, the right to the use of which was acquired by 01-7 (A-498) Cert. No. 843 (Give No. of application, title and date of Decree and Award No.) to that hereinafter described, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah. 1. The owner of right or application is William W. Cunningham etal 2. The name of the person making this application is Permits West, Inc. Attn: Brian Wood 3. The post office address of the applicant is. P.O. Box 1105 Monticello, Utah 84535 PAST USE OF WATER 4. The flow of water which has been used in second feet is 1.00 5. The quantity of water which has been used in acre feet is... November 1 April l 6. The water has been used each year from..... (Month) (Month) (Dav) 7. The water has been stored each year from.....(Month) (Day) (Month) 8. The direct source of supply is Nash Wash in Grand 9. The water has been diverted into earthen ditches ditch at a point located. 1) N. 410 ft. & W. 1750 ft. from E¼ Cor. Sec. 16; 2) S. 250 ft. & W. 2200 ft. from NE Cor. Sec. 17, Both T20S, R21E, SLB&M. 10. The water involved has been used for the following purpose: Irrigation NOTE: If for irrigation, give legal subdivisions of land and total acreage which has been irrigated. If for other purpses, give THE FOLLOWING TEMPORARY CHANGES ARE PROPOSED 11. The flow of water to be changed in cubic feet per second is 12. The quantity of water to be changed in acre-feet is _____2.0 13. The water will be diverted into the tank trucks ditch at a point located canal room point located N. 410 ft. & W. 1750 ft. from E½ Cor. Sec. 16, T20S, R21E, SLB&M. ..., 19.85...., toDecember 31............ 19...85... 14. The change will be made from ... August (Period must not exceed one year) 15. The reasons for the change are Change in the nature of use. 13-019-31188 A (List years change has been made)

17. The water involved is to be used for the following purpose: Drilling and maintenance purposes for the Nicor Federal 28-34 well located at the following point: N. 1072 ft. & W. 1471 ft. from the SE Cor. Sec. 28, T19S, R21E, SLB&M. Total acres.

NOTE: If for irrigation, give legal subdivisions of land to be irrigated. If for other purposes, give place and purpose of proposed use. **EXPLANATORY** Permits West Inc. is filing the Temporary Change Application in behalf of Nicor Exploration Co. A filing fee in the sum of \$5.00 is submitted herewith. I agree to pay an additional fee for/either investigating or ad-

Signature of Applicant

vertising this change, or both, upon the request of the State Engineer

RULES AND REGULATIONS

(Read Carefully)

This application blank is to be used only for temporary change of point of diversion, place or nature of use for a definitely fixed period not to exceed one year. If a permanent change is desired, request proper application blanks from the State Engineer.

Application for temporary change must be filed in duplicate, accompanied by a filing fee of \$7.50 Where the water affected is under supervision of a Water Commissioner, appointed by the State Engineer, time will be saved if the Application is filed with the Commissioner, who will promptly investigate the proposed change and forward both copies with filing fee and his report to the State Engineer. Applications filed directly with the State Engineer will be mailed to the Water Commissioner for investigation and report. If there be no Water Commissioner on the source, the Application must be filed with the State Engineer.

When the State Engineer finds that the change will not impair the rights of others he will authorize the change to be made. If he shall find, either by his own investigation or otherwise, that the change sought might impair existing rights he shall give notice to persons whose rights might be affected and shall give them opportunity to be heard before acting upon the Application. Such notice shall be given five days before the hearing either by regular mail or by one publication in a newspaper. Before making an investigation or giving notice the State Engineer will require the applicant to deposit a sum of money sufficient to pay the expenses thereof.

Address all communications to:
State Engineer
State Capitol Building
Salt Lake City, Utah

STATE ENGINEER'S ENDORSEMENTS

(Not to be filled in by applicant)

	Change Application No,
	(River System)
1.	M.A. Application received by Water Commissioner (Name of Commissioner)
	Recommendation of Commissioner
)
2. ,	June 24, 1985 Application received over counter in State Engineer's Office by
3.	Fee for filing application, \$7.50 received by; Rec. No
.4	
5.	
6 .	Fee for investigation requested \$
7.	Fee for investigation \$, received by : Rec. No
8.	; Recommendations:
9.	Fee for giving notice requested \$
11.	
12.	
13.	
	Change application protested by
	(Date Received and Name)
ā.	, at, at
	6-24-85 Application recommended for approval by
.7	Change Application approved and returned to TELINITA Wist, Inc.
т	THIS APPLICATION IS APPROVED SUBJECT TO THE FOLLOWING CONDITIONS:
	THE ATTENDATION IS ATTROVED SOBJECT TO THE PURPOWING COMPITIONS.
1.	
2.	
	· · · · · · · · · · · · · · · · · · ·
3.	

Manh State Engineer



Scott M. Matheson, Governor Temple A. Reynolds, Executive Director Dee C. Hansen, State Engineer

453 South Carbon Avenue • P.O. Box 718 • Price, UT 84501 • 801-637-1303

June 24, 1985

RECEIVED

JUN 26 1985

DIVISION UF OIL GAS & MINING

Division of Oil, Gas & Mining Attn: Arlene Sollis 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203

Re: Temporary Change 85-01-8

Dear Arlene:

Enclosed is a copy of the above referenced Temporary Change Application. Please keep this copy for your records and information.

Please contact us if you have any questions.

Sincerely,

Mark P. Page Area Engineer

Enclosure

MPP/mjk

, UTAH OIL AND GAS CONSERVATION COMMISSION WATER SANDS REMARKS WELL LOG ELECTRIC LOGS FILE LOCATION INSPECTED

DATE FILED 5-24-85 PUBLIC LEASE NO. LAND: FEE & PATENTED STATE LEASE NO. U-0149776 DRILLING APPROVED: 6-3-85 - GAS (EXCEPTION LOCATION) SPUDDED IN:

COMPLETED PUT TO PRODUCING: INITIAL PRODUCTION: GRAVITY A.P.I.

GOR: PRODUCING ZONES TOTAL DEPTH:

1072' FSL, FT. FROM (N) (S) LINE. 1471' FEL.

OPERATOR

WELL ELEVATION 10-6-86 DATE ABANDONED: ipplication Rescirded FIELD:

NICOR EXPLORATION CO.

UNIT: COUNTY:

GRAND

RGE.

21E

FEDERAL 28-34

SEC.

28

FT. FROM (E) (W) LINE.

TWP

INDIAN

1/4 - 1/4 SEC.

28

SUB. REPORT/abd

SW SE

SEC.

RGE.

APT #43-019-31188

OPERATOR

WELL NO.

LOCATION

TWP.

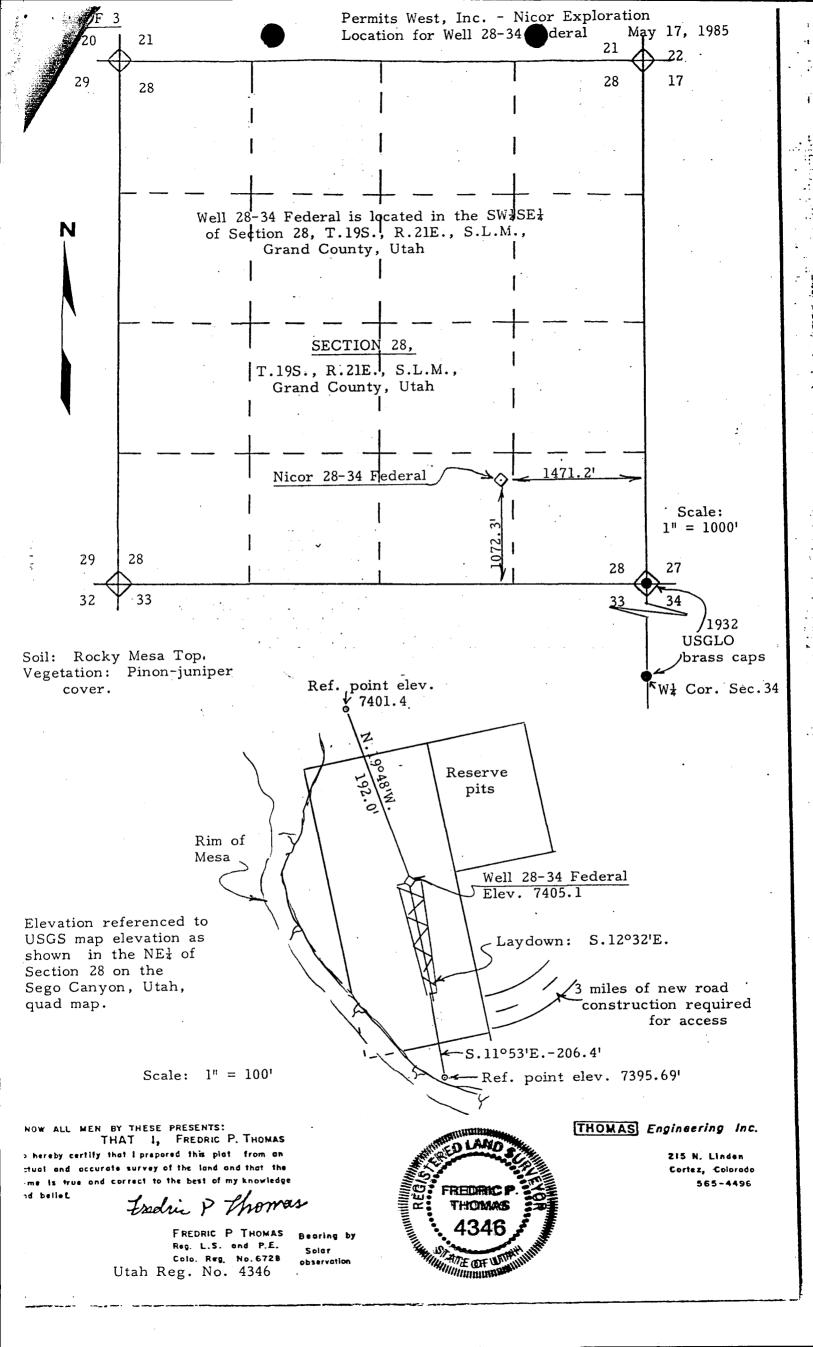
19S

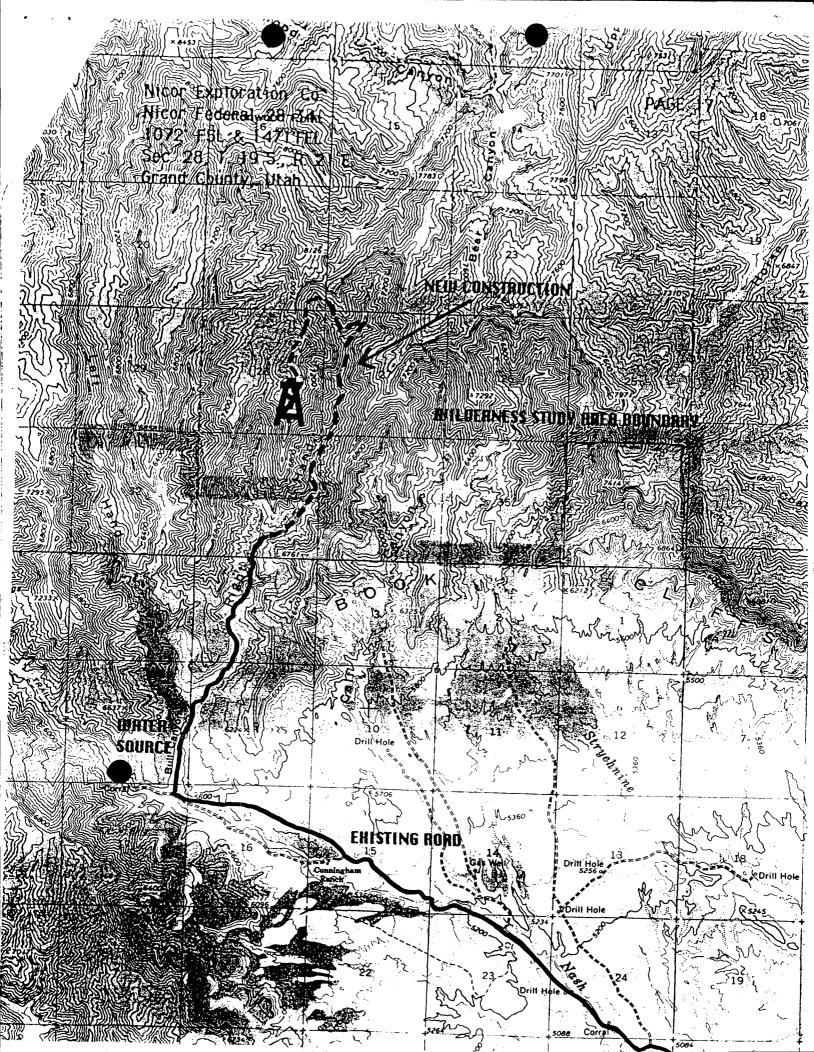
STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING

(Other instructions on reverse side)

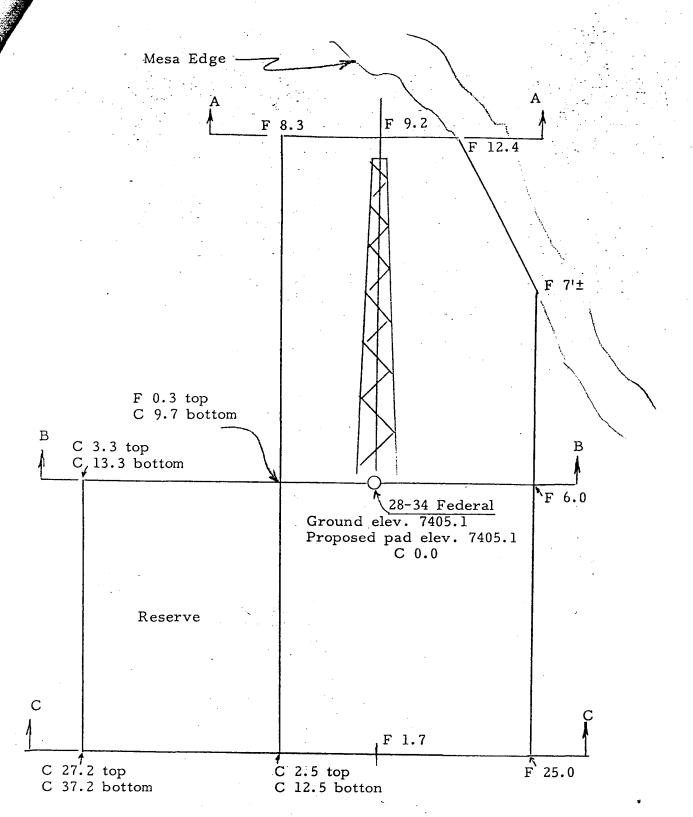
5. Lease Designation and Serial No. U-0149776

APPLICATI	ON FOR PERM	IT TO DRILL, DEI	PEN, OR PLUG I	BACK		tee or Tribe Name
la. Type of Work	DRILL (4)	DEEPEN []	PLUG BA	ск 🗆	7. Unit Agreement	
b. Type of Well	Cor. E		Similar To Mul		8. Farm or Lease	
Well 2. Name of Operator	Gas Well Othe	er	Single Mult Zone Zone	siple		icor
	Nicor Explora	ation Co.	(303)-232-9	9292	9. Well No.	1 00 74
3. Address of Operat	1		22.424			1 28-34
		lvd., Golden, Co			10. Field and Pool	ldcat
4. Location of Well At surface	(Report location clearly a	nd in accordance with any S		UNI	DES 16 NATE 11. Sec., T., R., N	1
		1072 F3	L & 1471' FEL		and Survey or	
At proposed prod.	zone	Same	Sw/56		28-195-2	
14. Distance in mile	and direction from near				12. County or Par	
		NE of Thompson			Grand	<u>Utah</u>
15. Distance from plocation to near	est		i. No. of acres in lease	17. No. of to this	f acres assigned well	•
	drlg. line, if any)	1072'	640		640	
	drilling, completed,	N/A	. Proposed depth 5800' L	29. Rotars وو	y or cable tools	Dotany
or applied for, or			3000		22. Approx. date	Rotary
21. Elevations (Show	whether DF, RT, GR, etc.	['] 7405' grd.	Gir			Approval
23.		PROPOSED CASING	AND CEMENTING PROGRAM	1		· · · · · · · · · · · · · · · · · · ·
Size of Hole	Size of Casing	Weight per Foot	Setting Depth		Quantity of C	ement
12/4"	85/8"	17#	0-600'			
٠.		• •	roved until 30 of-way has been	•		late that
The car car a car	2. Drilling p	rogr <u>am</u> is on fo APPROVED	llowing pages. BY THE STATE	.44	RECE	IVED
EUENVE	K. S	OF UTAH	DIVISION OF		SAAV O	1005
		OHL, GAS,	AND MINING	:	MAY 2 4	1303
MAY 2 4 1985		DATE 6/3	<i>(85</i>)	_		
man a too		BY THE	Buse	•	DIVISION	OF OIL
Production of the second		BY: / Jan A	12 (2)	•	0as & 1	MING
AMISHON OF C		WELL SPACI		•		
IN ABOVE SPACE ductive zone. If pro	DESCRIBE PROPOSED I	PROGRAM: If proposal is to lirectionally, give pertinent	deepen or blue back, give d data on subsurface locations	ata on prese and measur	ent productive zone red and true vertica	and proposed new pro l depths. Give blowou
preventer program, 1 24.	Sny.	<i> </i>				
Signed	non Wo	Title	Consultant/Agent fo	r Nicor	Date 5	-23-85
	ederal or State office use)					
Permit No			Approval Date			
Approved by Conditions of app	proval, if any:	Title		***************************************	Date	





Permits West, Inc. - Por Exploration Location for Well 28-34 Federal May 17, 1985



Scale: $l^{11} = 50^{1}$

THOMAS Engineering Inc.

215 N. Linden Cortez, Colorado 565-4496

All lease operations will be conducted in full compliance with applicable laws, regulations (43 CFR 3100), Onshore Oil & Gas Order *1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. The operator will furnish a copy of these conditions to his field representative to ensure compliance.

8 Point Drilling Program

Directional drilling was considered as an option for this well. After evaluation, directional drilling was discarded because it would more than double the drilling costs. Completion and production costs would also be increased. Given the small area (≈ 0.4 acre) of the drilling target, no alternate sites were feasible.

1. The estimated tops of important geologic markers are:

Formation Name Wasatch Mancos "B" Dakota Siltstone Dakota Cedar Mountain Morrison Entrada	Depth 0000° 4340° 5007° 5158° 5213° 5650°	Above Sea Level +7405' +3065' +2515' +2398' +2247' +2192' +1755'
---	---	---



2. The estimated depths at which water, oil, gas, or other mineral bearing zones are expected to be encountered are:

Formation Name	Type of Zone	Top & Bottom Depths
Mancos "B"	Oil/Gas	4340'-4360'
Dakota	Oil/Gas	5007'-5100'
Cedar Mountain	Oil	5158'-5213'
Morrison	Oil	5213'-5650'
Entrada	Oil/Water	5650'-5800' (TD)

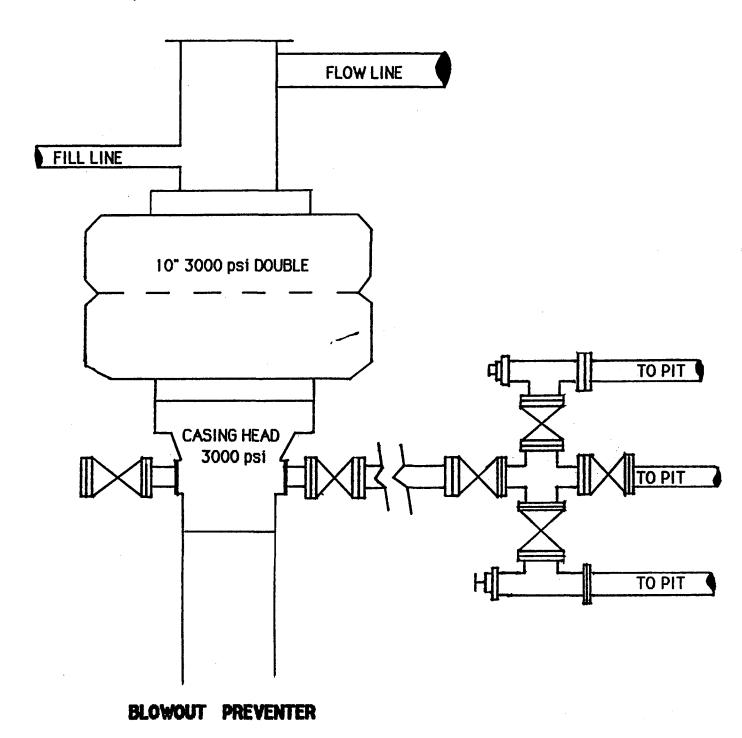
Surface and production casing will be set. Well will be drilled with air mist. All fresh water encountered during drilling will be recorded by depth, cased, and cemented. All oil and gas shows will be tested to determine commercial potential.

3. BOP systems will be consistent with API RP 53. A schematic diagram of the 10" 3000 psi BOP is on Page 3.

Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. BOP controls will be installed before drilling the surface casing plug, and will stay in use until the well is completed or abandoned. Preventers will be pressure tested before drilling casing cement plugs.

BOPs will be inspected, operated at least daily to ensure good mechanical working order, and the inspection recorded on the daily drilling report.







PAGE 4

Nicor Exploration Co. Nicor Federal 28-34 1072' FSL & 1471' FEL Sec. 28, T. 19 S., R. 21 E. Grand County, Utah

4. The proposed casing program is:

Hole Size	O.D.	Weight	Grade	Type	Age	Setting Depth
12-1/4"	8-5/8"	17#	K-55	ST&C	New	0'- 600'
7-7/8"	5-1/2"	15.5#	K-55	ST&C	New	0'-5800'

The proposed cementing program is:

Type of Casing	Cement & Additives	<u> Iop</u>
Surface	430 sx Class G + 2%CaCl + 1/4 lb/sx Floseal	Surface
Production	Lead: 200 sx light + 1/4 lb/sx Floseal	×
Production	Tail: 100 sx Class G + 1/4 lb/sx Floseal	×
	*Fill TD to 4800' (2000' of fill)	

- 5. The entire well will be drilled with an air mist. The blooie line will be misted to control dust. If mud is used, a mud logging unit will be installed. Pallets of gel, LCM, and lime will be on hand to control unexpected water flow.
- 6. No cores will be taken. The following logs will be run:
 Ground Level to Total Depth: GR
 Surface Casing to Total Depth: DIL GR CAL
 4000' to Total Depth: FDC CNL GR SP

If mud is used, then a drill stem test will be run in the Cedar Mountain, Morrison, and Entrada.

Whether the well is completed as a dry hole or producer, "Well Completion or Recompletion Report and Log" (Form 3160-4) will be submitted not later



than 30 days after completion of the well, or after completion of operations being performed, *per* 43 CFR 3164. Two copies of all logs, core descriptions & analyses, well test data, geologic summaries, sample descriptions, and all other data obtained during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. (If requested, sample cuttings, fluids, and/or gases will be submitted to the District Manager.)

- 7. The expected bottom hole pressure is 2697 psi.

 No abnormal pressures, temperatures, or hydrogen sulfide are expected.
- 8. The anticipated spud date is August 15, 1985. It is expected it will take 8 days to drill the well and 7 days to complete the well.

Nicor will begin dirt work upon approval.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before operations resume.

The spud date will be phoned to the Area Manager, a minimum of 24 hours before spudding. A Sundry Notice (Form 3160-5), reporting the spud date and time, will be sent to the District Manager within 24 hours after spudding. If the spud is on a weekend or holiday, the Sundry will be sent on the following regular work day.



Starting with the month in which operations begin, and continuing each month until the well is physically plugged and abandoned, a "Monthly Report of Operations" (Form 3160-6) will be sent to the District Manager.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual events will be promptly reported to the Resource Area *per* NTL-3A.

If a replacement rig is planned for completion, a Sundry Notice to that effect will be filed for prior approval of the District Manager. All conditions of this approved plan apply to all operations of the replacement rig. In emergencies, verbal approval can be given by the District Manager.

If the well is successfully completed for production, then the District Manager will be notified. Written notification will be sent not later than 5 business days following the date on which the well is placed on production. The Area Manager will schedule a first production conference within 15 days after receipt of the first production notice.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Manager. This preliminary approval will not exceed 30 days or 50 MMcf of gas. Approval to vent/flare beyond this initial period will require the District Manager's approval per NTL-4A.

No well abandonment operations will begin without the prior approval of the District Manager. Oral approval will be obtained from the District Manager for newly drilled dry holes, failures, or emergencies. A Sundry Notice will be sent to the District Manager within 30 days following completion of the well for abandonment. The Sundry will note where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the reclamation required by the approved APD or abandonment notice has been completed to the satisfaction of BLM.



PAGE 7

Once plugged, a capped regulation dry hole marker will be erected. The following information will be beaded on with a welding torch: Nicor Exploration Co., Nicor Federal 28-34, SWSE 28-19-21, U-0149776.



13 Point Surface Use Plan

1. EXISTING ROADS (Pages 16 & 17)

From the West Cisco Exit on 1-70 go 1.5 miles SE on U-128.
Then go 14.5 miles NW on the Nash Wash Road to the Cunningham Ranch.
Then go 2.0 miles N and NW to Bull Canyon.
Then go 0.8 miles N to Right Hand Fork.
Then go 2.3 miles NE to a fork in the road.
New construction will begin at the fork in the road.

The first 18.0 miles are county roads and will not need upgrading. The roads will be maintained to a standard equal to their present condition. An Encroachment Permit has been approved by the Grand County Road Dept.

The final 3.1 miles of existing road will require a BLM right-of-way. This road will not need upgrading, but will be maintained by a grader to remove rocks which have rolled onto the road.

2. PLANNED ACCESS ROADS (Page 17)

The first 3.0 miles of new construction will be off-lease road authorized by a right-of-way. The final half mile of new construction will be on-lease road authorized by the APD. All of the road has been flagged. All of the drainage crossings will be low water crossings. None of the roads will be surfaced, nor will any culverts be installed.

From the point at which new construction will begin, a road 3.5 miles in length will lead to the well. A 20' wide flatbladed road (maximum disturbed width of 30') will follow the canyon bottom for the first 2.0 miles. Average grade is 6% and maximum is 8%. Turnouts will be placed 1,000' apart in the



last half mile.

(While a canyon bottom road is not ideal, it is a "practicable alternative" as referenced in Section 2(a)(2) of Executive Order 11988. Building two miles of bench cut road would unnecessarily and unduly increase the total environmental impact, further impair the wilderness suitability of the canyon, and add considerable difficulty to reclamation.)

The next 1.0 miles of 20' wide road (maximum disturbed width of 60') will require a full bench cut. Average grade is 10%, maximum grade will be 15%. Turnouts will be located every 1,000'. Road surface will be insloped 2-4% and drainage dips placed every 160'.

The final half mile of 20' wide road (maximum disturbed width of 30') will be flatbladed to minimize wilderness impairing impacts. Average grade will be 6%, maximum will be 8%. No turnouts will be used.

The road will be reclaimed or upgraded to Class III Standards within 60 days of dismantling the drill rig. If this deadline cannot be met, Nicor will notify the Area Manager so temporary drainage control can be installed.

Surface disturbance and vehicle travel will be limited to the approved location and road. Any extra area needed will be approved in advance by the Area Manager.

3. EXISTING WELLS

There are no water, injection, producing, or drilling wells within a 1 mile radius of the location. There is one shut-in gas well 5,071' SSW operated by J.C. Thompson at 1338 FSL and 2233 FEL Sec. 33, T.19 S., R. 21 E.



4. PROPOSED PRODUCTION FACILITIES

The type and layout of the production facilities are not known now. A Sundry Notice will be submitted for approval before they are installed.

All permanent (onsite for at least 6 months) structures, including pump jacks, will be painted a flat, nonreflective Juniper Green color within 6 months of installation. OSHA parts may be excluded.

If a tank battery is built, it will be surrounded by a dike of sufficient capacity to contain 150% of the storage capacity of the battery. All loading lines will be placed inside the dike.

All site security guidelines in 43 CFR 3162.7 will be obeyed. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, must have the prior written approval of the District Manager.

Gas meter runs for each well will be within 500' of the wellhead. The gasflowline will be buried from the wellhead to the meter, along with any other sections on the pad. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well pad. Meters will be calibrated in place before any deliveries. Tests for meter accuracy will be conducted monthly for the first 3 months on new meters, and at least quarterly thereafter. The Area Manager will be provided with a date and time for the first meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be sent to the Area Manager. All meters will conform with the API standards for liquid hydrocarbons and AGA standards for natural gas measurement.



5. WATER SUPPLY (Page 17)

Any water needed will be pumped directly from Nash Wash (SESW 8-20-21) into a truck and hauled to the well. No construction will be done. This is casual use as defined in 43 CFR 2800.0-5(m) and BLM Manual 2801 A.2.b.,c., & d. A temporary permit to appropriate water has been filed with the State. Nicor will not use any water without Bill Cunningham's permission.

6. CONSTRUCTION MATERIALS

All construction materials are native *in situ* soils on lease. The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

7. WASTE DISPOSAL

The reserve pit will not be lined unless fractured rock is encountered. At BLM's request during the on-site, the reserve pit (Page 18) will be reduced in size and shifted south to avoid a large cut on the north. It will be fenced on 3 sides with 3 strands of barbed wire. The 4th side will be fenced once the rig moves off. The fence will be kept in good repair while the pit is drying.

All trash will be placed in a portable trash cage. When full, it will be hauled to an approved landfill.

Human waste will be disposed of in 20' deep ratholes or chemical toilets. The ratholes will be immediately filled when the trailers are removed.

Produced water will be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period an NTL-2B



application will be submitted for the District Manager's approval of a permanent disposal method and site.

8. ANCILLARY FACILITIES

There will be no ancillary facilities.

9. WELL SITE LAYOUT

See Page 18 and afterwards for depictions of the well pad, cross sections, cut and fill diagrams, reserve pit, access road onto the pad, parking, living facilities, soil stockpile, and rig orientation.

The trees and top 8" of topsoil will be removed from the location and stockpiled separately on the east side of the location.

10. RECLAMATION

Immediately upon completing drilling, the pad and surrounding area will be cleared of all remaining debris, materials, trash, and junk not required for production.

Nicor will contact the Area Manager 48 hours before starting reclamation dirt work, and upon completion of reclamation. (In the event of production, the pit and that part of the pad not needed for production will be reclaimed as follows.)

All disturbed areas will be recontoured to the approximate natural contours. Stockpiled topsoil will be evenly distributed over disturbed areas. Prior to seeding, all disturbed areas, including roads, will be scarified and left with



PAGE 13

Nicor Exploration Co. Nicor Federal 28-34 1072' FSL & 1471' FEL Sec. 28, T. 19 S., R. 21 E. Grand County, Utah

a rough surface.

Seed will be broadcast at a time specified by BLM. A harrow or similar implement will be dragged over the seeded area to assure seed cover. The following seed will be sown:

Species	lbs/ac
Bluebunch wheatgrass	2
Indian ricegrass	2
Crested wheatgrass	2
Yellow sweetclover	1
Alfalfa	1
Antelope bitterbrush	2
Fourwing saltbush	2
Mexican cliffrose	2

11. OWNERSHIP

The surface and mineral owner is the U.S. Government.

12. OTHER INFORMATION

There will be no change from the proposed drilling and/or workover plan without prior approval from the District Manager. A Sundry Notice will be filed for approval for all changes of plans and other operations *per* CFR 43 3164.

Safe drilling and operating practices must be used. All wells, whether drilling, producing, suspended, or abandoned will be identified *per* 43 CFR 3162.2.



PAGE 14

Nicor Exploration Co. Nicor Federal 28-34 1072' FSL & 1471' FEL Sec. 28, T. 19 S., R. 21 E. Grand County, Utah

If subsurface cultural materials are exposed during construction, work in that spot will stop immediately and the Area Manager will be called.

This permit will be valid for one year from the date of approval. After the permit expires, a new application will be filed for approval of any future operations.

The District Manager's mailing address is P.O. Box 970, Moab, Utah 84532. His phone number is 801-259-6111.

The Area Manager's mailing address is P.O. Box M, Moab, Utah 84532. His phone number is 801-259-8193.

From the well, the nearest hospitals are 75 miles east in Fruita, Colorado or 80 miles south in Moab, Utah. Nearest gas stations, public phone, food, etc. are 41 miles southwest in Thompson, Utah.



13. REPRESENTATION AND CERTIFICATION

For questions concerning the APD, please contact:

Brian Wood Permits West, Inc. P.O. Box 1105 Monticello, Utah 84535 801-587-2087

Nicor Exploration's field representative is:
John Freshwater, Manager - Operations
Nicor Exploration Co.
1667 Cole Blvd.
Golden, Co. 80401
303-232-9292

CERTIFICATION

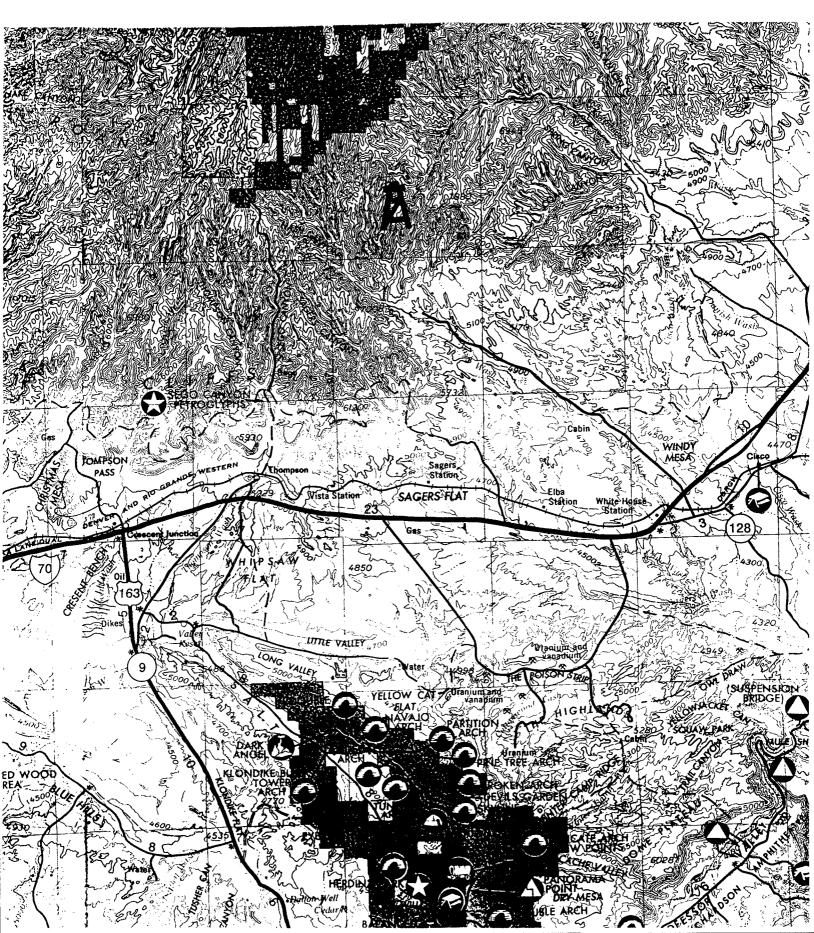
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Nicor Exploration Co. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

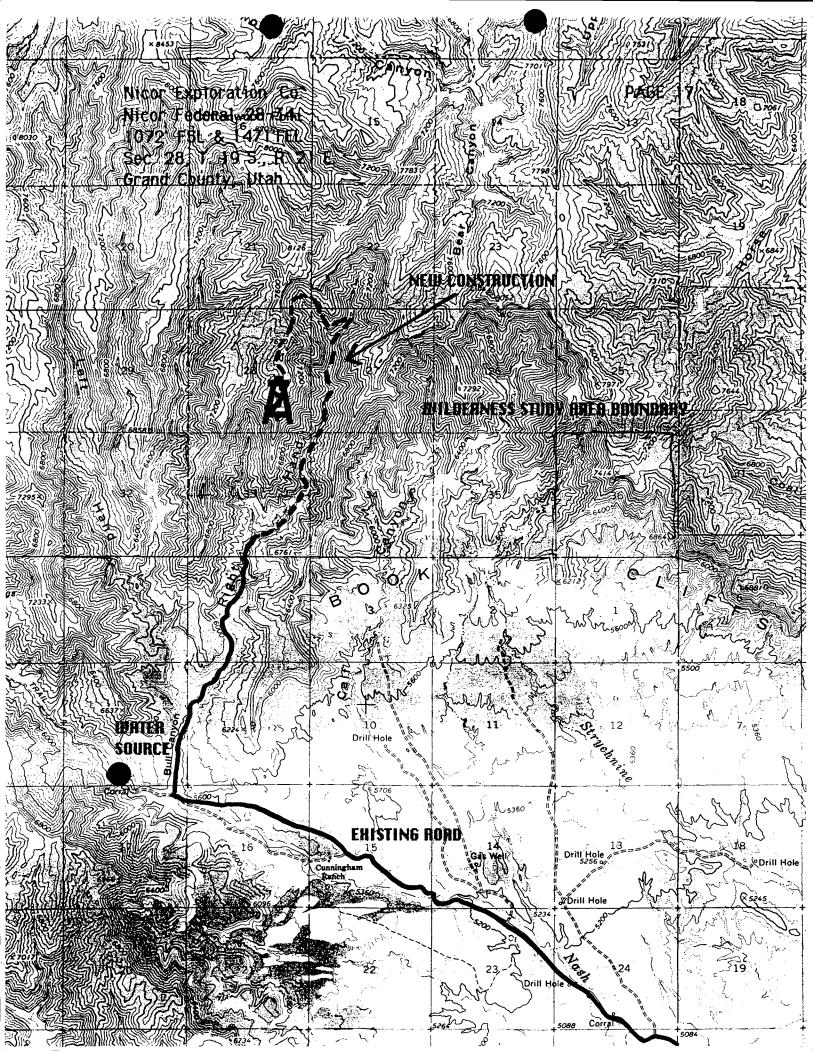
Date May 23, 1985

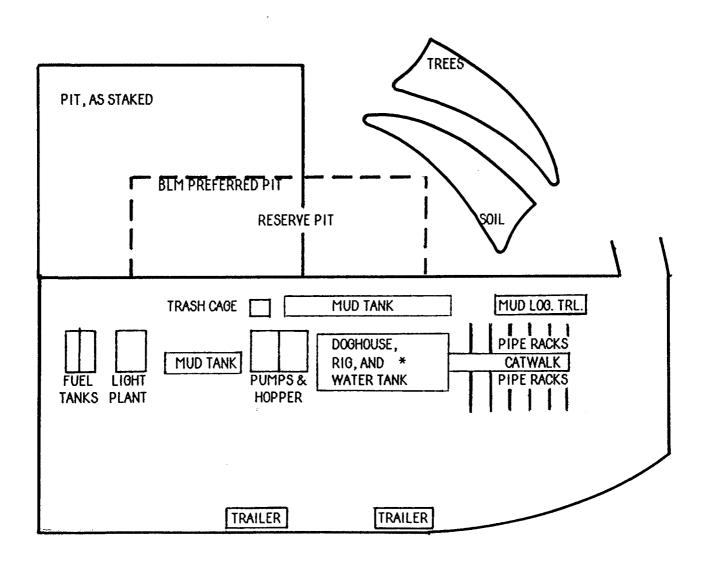
Brian Wood - Consultant for Nicor Exploration Co.PRR.

PERMITS WEST

PROVIDING PERMITS for the ENERGY INDUSTRY

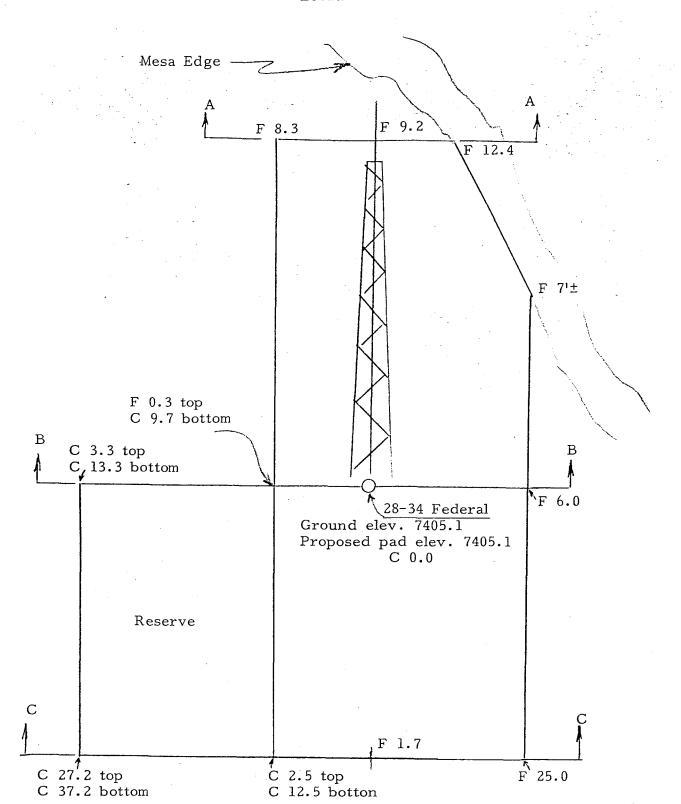








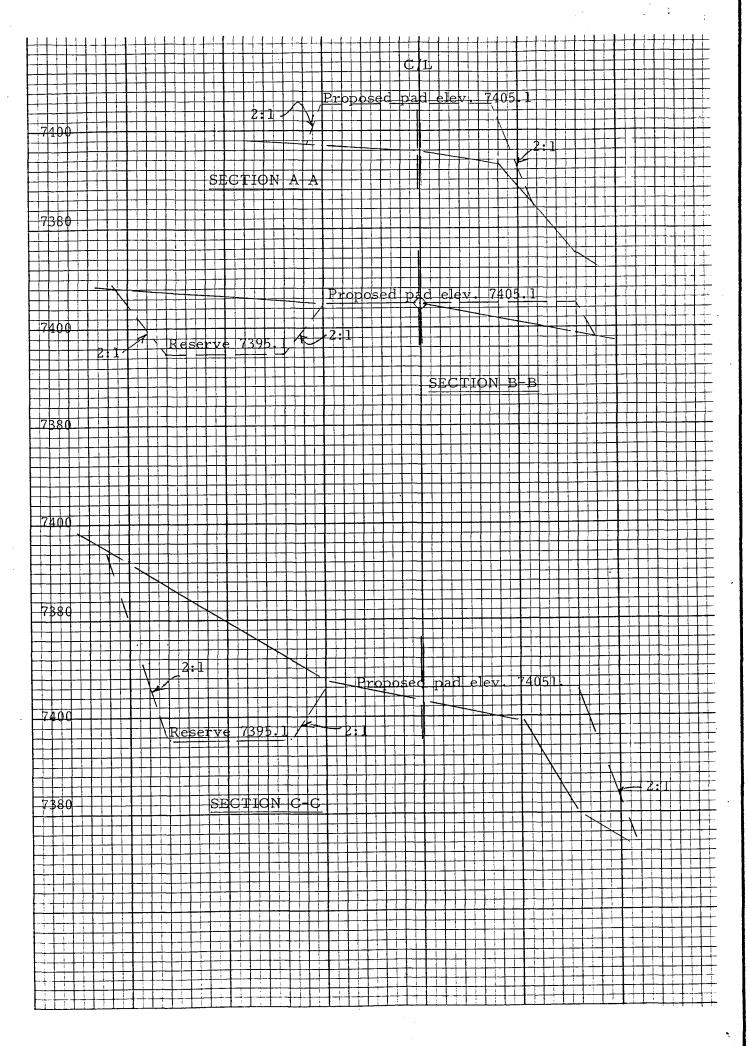




Scale: $l^{11} = 50^{1}$

THOMAS Engineering Inc.

215 N. Linden Cortez, Colorado 565-4496 Permits West, Inc. - icor Exploration Location for Well 28-54 Federal May 17, 1985



Horizontal scale: 1" = 50' Vertical scale: 1" = 20'

THOMAS Engineering Inc.

215 N. Linden
Cortez, Colorado
565-4496

Form 3160-8 (November 1983) (Formerly 9-1123) (Submit in triplicate to appropriate BLM District Office)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

STATE OFFICE:

BUREAU OF LAND MANAGEMENT - Moab, Utah

SERIAL NO.:

U-0149776

and hereby designates

NAME:

NICOR Exploration Company

ADDRESS:

1667 Cole Blvd.

Golden, Colorado 80401

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the authorized officer may serve written or oral instructions in securing compliance with the Operating Regulations (43 CFR 3160) with respect to (describe acreage to which this designation is applicable):

Township 19 South, Range 21 East

Section 28: All

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the authorized officer of any change in the designated operator.

HARPER OIL COMPANY

By: Charle E. met

Charles E (Signature of lessee)
Attorney-in-fact

May 22, 1985

(Date)

P. O. Box 5928 T.A., Denver, CO 80217

(Address)

This form does not constitute an information collection as defined by 44 U.S.C. 3502 and thereto does not require OMB approval.



NICOR EXPLORATION

1667 Cole Boulevard Golden, Colorado 80401 Phone 303 232 9292

May 17, 1985

To Whom it May Concern:

NICOR Exploration authorizes Brian Wood of Permits West, Inc. to represent us as our agent for the NICOR 28-34 Federal Well. This includes conducting the on-site, preparing the APD, signing the APD and right-of-way, and any related matters.

Sincerely,

K. C. Wardwell

Exploration Manager

KCW/mw

OPERATOR <u>Micor Explors</u> WELL NAME <u>School</u> 28-3	tion Co.	DATE 5-30-85
WELL NAME School 28-3		
SEC <u>SW SE</u> 28 T <u>195</u>	R ALE COUNTY	Grand
43-019-31188 API NUMBER	1	OF LEASE
CHECK OFF:		
PLAT	BOND	NEAREST WELL
∠ LEASE	FIELD	POTASH OR OIL SHALE
PROCESSING COMMENTS:	4960'	
Mo the wells within Med within Exception location	~~~~	
Exception location		
	·	
	<u> </u>	
APPROVAL LETTER:		
SPACING: A-3 UNIT	c-3-a	CAUSE NO. & DATE
c-3-b	c-3-c	
STIPULATIONS:		
STIPULATIONS: 1- Water 2 Exception Isration	ć	



355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

June 3, 1985

Nicor Exploration Company 1667 Cole Blvd. Golden, Colorado 80401

Gentlemen:

Re: Well No. Federal 28-34 - SW SE Sec. 28, T. 19S, R. 21E 1072' FSL, 1471' FEL - Grand County, Utah

Approval to drill the above referenced gas well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure, subject to the following stipulations:

- 1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water.
- 2. Submittal to the Division of information justifying the necessity for an exception location and verification of ownership within a radius of 500 feet of the proposed location.

In addition, the following actions are necessary to fully comply with this approval:

- 1. Spudding notification to the Division within 24 hours after drilling operations commence.
- 2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
- 3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695 or R. J. Firth, Associate Director, (Home) 571-6068.

Page 2 Nicor Exploration Company Well No. Federal 28-34 June 3, 1985

4. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-019-31188.

Sincerely,

Jøhn R. Baza

Petroleum Engineer

as

Enclosures

cc: Branch of Fluid Minerals



June 3, 1985

Arlene Sollis Utah Div. of Oil, Gas, & Mining 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 RECEIVED

JUN 0 5 1985

DIVISION OF OIL
GAS & MINING

Dear Arlene,

As requested, I am asking that NICOR Exploration Co. be granted an exception for the NICOR Federal 28–34 Well (Sec. 28, T. 19 S., R. 21 E.) *per* Rule C-3(c):

- 1) As stated on PAGE 1 of the APD, the geologic target is of a size and in a location so as to prevent an orthodox location.
- 2) As seen on PAGE 17 and the surveyor's plats of the APD, topography prevents an orthodox location. An orthodox location in the SWSE would be on slopes in excess of 45 degrees.
- 3) The ownership of all oil and gas leases within a radius of 660 feet of the proposed well is common with the ownership of the oil and gas lease under the proposed well.

NICOR Exploration will submit an approved permit to appropriate water before spudding the well.

Please feel free to call me if you have any other questions.

Sincerely yours

Brian Wood



United States Department of the Interior 3162 (U-065)

BUREAU OF LAND MANAGEMENT

Moab District P. O. Box 970 Moab, Utah 84532

SEP 30 1986



State of Utah Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203

Attention: Mr. John Baza

DIVISION OF OIL. GAS & MINING

Re: Requests of Status of Wells

Dear Mr. Baza:

We are replying to your requests for status on the following wells:

1) F-L Energy Corporation
Well No. Alker Federal 1-11
Sec. 11, T. 15 S., R. 12 E.
Well No. Alker Federal 1-15
Sec. 15, T. 15 S., R. 12 E.
Lease U-52626

Approval was given for the extension of application on Well No. 1-11 until 10/18/86, so Wells 1-11 and 1-15 could be drilled at the same time. No activity at this time.

2) Howell Oil Company
Well No. Gebauer-Risenhoover 24
Sec. 7, T. 42 S., R. 19 E.
Lease U-7303

We are in the process of rescinding this application.

3) Nicor Exploration Company Well No. Federal 28-34 Sec. 28, T. 19 S., R. 21 E. Lease U-0149776

Application was returned unapproved. Lease terminated two days after the receipt of the application.

4) TXO Production Company Well No. ARCO Federal "B" 2 Sec. 6, T. 16 S., R. 25 E. Lease U-9831

The pad was built, but the well was never drilled. TXO has intentions to drill this well at some point in the future (under a new APD) and has asked for approval to leave the well pad as is. This approval will be granted on a yearly basis. Approval was granted September 1, 1986.

If you have any questions, please contact the Branch of Fluid Minerals (801) 259-6111.

Sincerely yours,

ACTING District Manager

MOAB DISTRICT OFFICE

F-L ENERGY CORPORATION
Alker Federal Well No. 1-11
Sec.11, T.15S, R.12E,
Carbon County, Utah
API NO. 43-007-30094

Alker Federal Well No. 1-15 Sec.15, T.15S, R.12E, Carbon County, Utah API NO. 43-007-30113

HOWELL OIL COMPANY Gebauer Risenhoover Well No. 24 Sec.7, T.42S, R.19E San Juan County, Utah API No. 43-037-31155

NICOR EXPLORATION COMPANY Federal Well No. 28-34 Sec.28, T.19S, R.21E, Grand County, Utah API NO. 43-019-31188

TXO PRODUCTION COMPANY
ARCO Federal "B" Well No. 2
Sec.6, T.16S, R.25E
Grand County, Utah
API No. 43-019-31146



Norman H. Bangerter, Governor Dee C. Hansen, Executive Director Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

October 6, 1986

Nicor Exploration Company 1667 Cole Blvd. Golden, Colorado 80401

Gentlemen:

RE: Well No. Federal 28-34, Sec.28, T.19S, R.21E, Grand County, Utah, API NO. 43-019-31188

In concert with action taken by the U.S. Bureau of Land Management, approval to drill the above referenced well is hereby rescinded. A new Application for Permit to Drill must be filed with this office for approval, prior to future drilling of the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Since pely,

Jøhn R. Baza∖

⊭etroleum Engineer

sb

cc: BLM-Moab

D. R. Nielson

R. J. Firth

Well file

0327T-7

JUN 17 1985 WATER RIGHTS PRICE

To Whom it May Concern:

I hereby agree to sell water from Nash Wash to NICOR Exploration Co., or any of its contractors, for use with the NICOR Federal 28-34 Well (1072' FSL & 1471' FEL Sec. 28, T. 19 S., R. 21 E., Grand County, Utah). The amount of water sold will not exceed 2.0 acre-feet.

I also agree to this temporary change in the use of my water rights.

Bill Cunningham

Date



453 South Carbon Avenue • P.O. Box 718 • Price, UT 84501 • 801-637-1303

June 24, 1985

Permits West, Inc. Attn: Brian Wood P.O. Box 1105 Monticello, Utah 84535

Re: Temporary Change 85-01-8

Dear Mr. Wood:

The above referenced Temporary Change Application has been approved. A copy is herewith enclosed for your records and information.

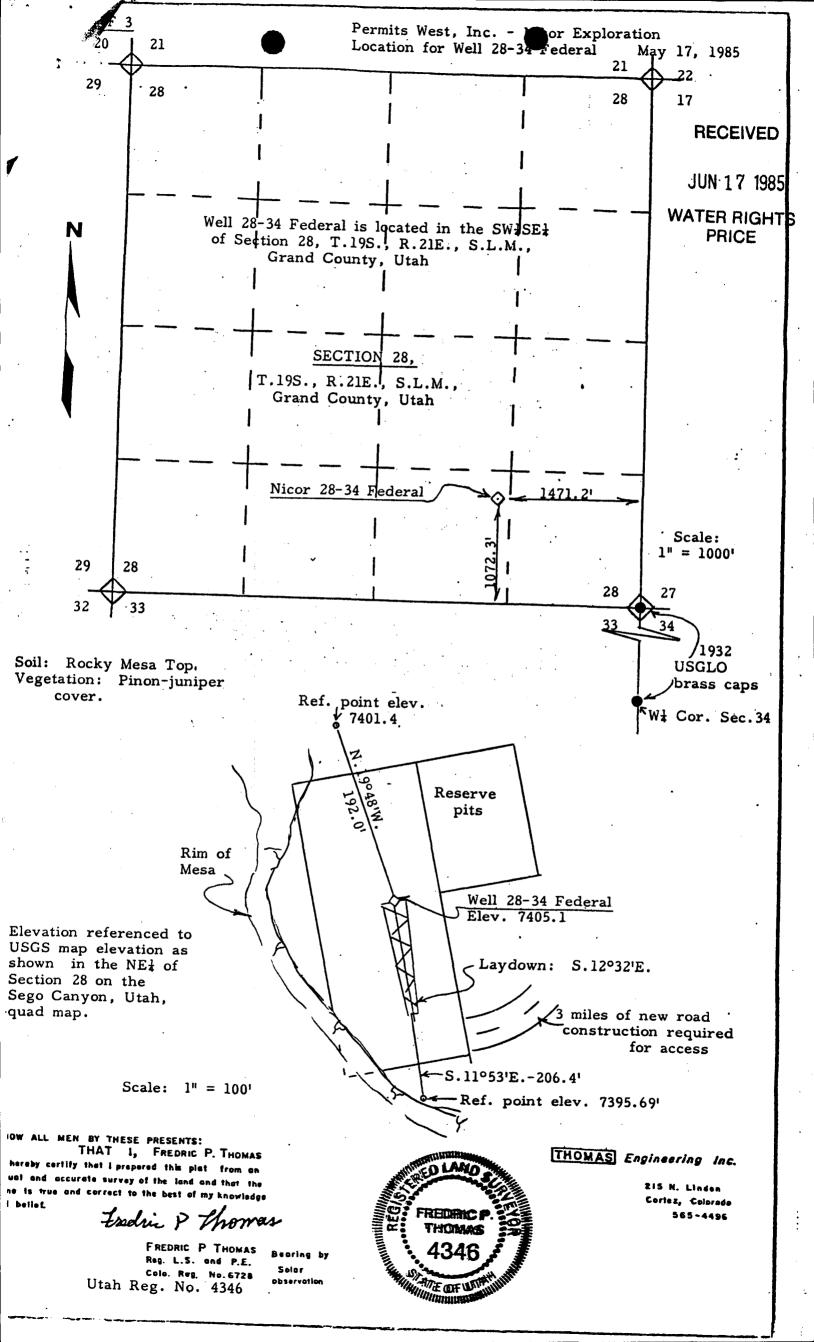
If you have any questions, please feel free to contact me.

Sincerely,

Mark P. Page Area Engineer for Robert L. Morgan, P.E. State Engineer

Enclosure

RLM/MPP/mjk



Form	m	8-61	-2M
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	· ·
APPLICATION NO	85-01-8
DISTRIBUTION SYSTEM	

Application For Temporary Change of Point of Diversion, RECEIVED

Place or Purpose of Use RECEIVED STATE OF UTAH JUN 24 1985 JUN 2 6 1985 WATER RIGHTS (To Be Filed in Duplicate) PRICE CIVISION OF UIL June 18. . . . 19. 85 GAS 8 MINING Monticello, Utah For the purpose of obtaining permission to temporarily change the point of diversion, place or purpose of use (Strike out written matter not needed) of water, the right to the use of which was acquired by 01-7 (A-498) Cert. No. 843 (Give No. of application, title and date of Decree and Award No.) to that hereinafter described, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah. 1. The owner of right or application is William W. Cunningham etal 2. The name of the person making this application is Permits West, Inc. Attn: Brian Wood 3. The post office address of the applicant is. P.O. Box 1105 Monticello, Utah 84535 PAST USE OF WATER 4. The flow of water which has been used in second feet is 1.00 5. The quantity of water which has been used in acre feet is... November 1 April l 6. The water has been used each year from..... (Month) (Month) (Dav) 7. The water has been stored each year from.....(Month) (Day) (Month) 8. The direct source of supply is Nash Wash in Grand 9. The water has been diverted into earthen ditches ditch at a point located. 1) N. 410 ft. & W. 1750 ft. from E¼ Cor. Sec. 16; 2) S. 250 ft. & W. 2200 ft. from NE Cor. Sec. 17, Both T20S, R21E, SLB&M. 10. The water involved has been used for the following purpose: Irrigation NOTE: If for irrigation, give legal subdivisions of land and total acreage which has been irrigated. If for other purpses, give THE FOLLOWING TEMPORARY CHANGES ARE PROPOSED 11. The flow of water to be changed in cubic feet per second is 12. The quantity of water to be changed in acre-feet is _____2.0 13. The water will be diverted into the tank trucks ditch at a point located canal room point located N. 410 ft. & W. 1750 ft. from E½ Cor. Sec. 16, T20S, R21E, SLB&M. ..., 19.85...., toDecember 31............ 19...85... 14. The change will be made from ... August (Period must not exceed one year) 15. The reasons for the change are Change in the nature of use. 13-019-31188 A (List years change has been made)

17. The water involved is to be used for the following purpose: Drilling and maintenance purposes for the Nicor Federal 28-34 well located at the following point: N. 1072 ft. & W. 1471 ft. from the SE Cor. Sec. 28, T19S, R21E, SLB&M. Total acres.

NOTE: If for irrigation, give legal subdivisions of land to be irrigated. If for other purposes, give place and purpose of proposed use. **EXPLANATORY** Permits West Inc. is filing the Temporary Change Application in behalf of Nicor Exploration Co. A filing fee in the sum of \$5.00 is submitted herewith. I agree to pay an additional fee for/either investigating or ad-

Signature of Applicant

vertising this change, or both, upon the request of the State Engineer

RULES AND REGULATIONS

(Read Carefully)

This application blank is to be used only for temporary change of point of diversion, place or nature of use for a definitely fixed period not to exceed one year. If a permanent change is desired, request proper application blanks from the State Engineer.

Application for temporary change must be filed in duplicate, accompanied by a filing fee of \$7.50 Where the water affected is under supervision of a Water Commissioner, appointed by the State Engineer, time will be saved if the Application is filed with the Commissioner, who will promptly investigate the proposed change and forward both copies with filing fee and his report to the State Engineer. Applications filed directly with the State Engineer will be mailed to the Water Commissioner for investigation and report. If there be no Water Commissioner on the source, the Application must be filed with the State Engineer.

When the State Engineer finds that the change will not impair the rights of others he will authorize the change to be made. If he shall find, either by his own investigation or otherwise, that the change sought might impair existing rights he shall give notice to persons whose rights might be affected and shall give them opportunity to be heard before acting upon the Application. Such notice shall be given five days before the hearing either by regular mail or by one publication in a newspaper. Before making an investigation or giving notice the State Engineer will require the applicant to deposit a sum of money sufficient to pay the expenses thereof.

Address all communications to:
State Engineer
State Capitol Building
Salt Lake City, Utah

STATE ENGINEER'S ENDORSEMENTS

(Not to be filled in by applicant)

	Change Application No,
	(River System)
1.	M.A. Application received by Water Commissioner (Name of Commissioner)
	Recommendation of Commissioner
)
2. ,	June 24, 1985 Application received over counter in State Engineer's Office by
3.	Fee for filing application, \$7.50 received by; Rec. No
.4	
5.	
6 .	Fee for investigation requested \$
7.	Fee for investigation \$, received by : Rec. No
8.	; Recommendations:
9.	Fee for giving notice requested \$
11.	
12.	
13.	
	Change application protested by
	(Date Received and Name)
ā.	, at, at
	6-24-85 Application recommended for approval by
.7	Change Application approved and returned to TELINITA Wist, Inc.
т	THIS APPLICATION IS APPROVED SUBJECT TO THE FOLLOWING CONDITIONS:
	THE ATTENDATION IS ATTROVED SOBJECT TO THE PURPOWING COMPITIONS.
1.	
2.	
	· · · · · · · · · · · · · · · · · · ·
3.	

Manh State Engineer



Scott M. Matheson, Governor Temple A. Reynolds, Executive Director Dee C. Hansen, State Engineer

453 South Carbon Avenue • P.O. Box 718 • Price, UT 84501 • 801-637-1303

June 24, 1985

RECEIVED

JUN 26 1985

DIVISION UF OIL GAS & MINING

Division of Oil, Gas & Mining Attn: Arlene Sollis 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203

Re: Temporary Change 85-01-8

Dear Arlene:

Enclosed is a copy of the above referenced Temporary Change Application. Please keep this copy for your records and information.

Please contact us if you have any questions.

Sincerely,

Mark P. Page Area Engineer

Enclosure

MPP/mjk